Minutes of the meeting of the Quality and Patient Safety Committee of the Board of Directors of the Cook County Health and Hospitals System held Wednesday, October 9, 2013 at the hour of 9:30 A.M. at 1900 W. Polk Street, in the Second Floor Conference Room, Chicago, Illinois.

I. Attendance/Call to Order

Chairman Collens called the meeting to order.

Present: Chairman Lewis M. Collens and Directors Wayne M. Lerner, DPH, FACHE, and Luis Muñoz,

MD, MPH (3)

Director Hon. Jerry Butler

Absent: None (0)

Additional attendees and/or presenters were:

Krishna Das, MD – System Director of Quality, Patient Safety, Regulatory and Accreditation

Randolph Johnston –System Associate General Counsel

Linda Rae Murray, MD – Cook County Department of Public Health

Elizabeth Reidy – System General Counsel

Tanda Russell – Interim Executive Director of Nursing

Deborah Santana – Secretary to the Board John Jay Shannon, MD – Chief of Clinical Integration

Ozuru Ukoha, MD – John H. Stroger, Jr. Hospital of Cook County

II. Public Speakers

Chairman Collens asked the Secretary to call upon the registered speakers.

The Secretary called upon the following public speaker:

1. George Blakemore Concerned Citizen

III. Report from System Director of Quality, Patient Safety, Regulatory and Accreditation

A. Update on Culture of Safety Survey Results (Attachment #1)

Dr. Krishna Das, System Director of Quality, Patient Safety, Regulatory and Accreditation, provided an overview of the information presented regarding the Culture of Safety Survey results. The Committee reviewed and discussed the information.

Director Lerner thanked Dr. Das and the staff for the exceptional reports that have been provided to the Committee. He noted that the strategic issue is really the issue of the culture - not a culture focusing on safety, but a culture focusing on trust. This needs to be embedded in an overall human resource plan that deals with the interaction between front-line managers and supervisors and their direct staff, because the supervisors are seen as the representatives of management. He inquired whether there is a human resource policy or effort underway that will encapsulate this element. Dr. Das responded that there does need to be a human resources policy addressing this; that subject has been under discussion, and will probably take some time to build because the System has a very established infrastructure. Director Lerner stated that he hopes to receive a report sometime in the future that reflects the three parties involved – front-line managers and supervisors, direct staff, and labor – and how they are working towards the effort of a culture focusing on trust.

IV. Action Items

A. Minutes of the Quality and Patient Safety Committee Meeting, September 23, 2013

Director Lerner, seconded by Director Muñoz, moved to accept the Minutes of the Quality and Patient Safety Committee Meeting of September 23, 2013. THE MOTION CARRIED UNANIMOUSLY.

B. **Medical Staff Appointments/Re-appointments/Changes (Attachment #2)

Director Muñoz, seconded by Director Lerner, moved to approve the Medical Staff Appointments/Reappointments/Changes. THE MOTION CARRIED UNANIMOUSLY.

C. Any items listed under Sections IV, V and VI

V. Recommendations, Discussion/Information Items

- A. Report from the Cook County Department of Public Health (CCDPH) (Attachment #3)
 - i. Updates on the following:
 - Public Health Accreditation Board (PHAB)
 - 2015 Strategic Plan
 - Quality Activities
 - ii. Receive the following policy briefs:
 - Obesity Brief
 - Physical Activity Brief
 - School Meals Brief
 - iii. Receive and file the following reports:
 - Annual Tuberculosis Surveillance Report, 2012
 - Sexually Transmitted Infections Surveillance Report, 2011

Dr. Linda Rae Murray, Chief Medical Officer of CCDPH, provided an overview of the information and reports presented. The Committee reviewed and discussed the information.

During the review of the information, Director Muñoz inquired regarding emergency planning. Dr. Murray stated that emergency planning is a big, relatively well-funded area. County government has a structure headed by Michael Masters, with whom CCDPH interacts; with regard to suburban Cook County, one of CCDPH's tasks is to work with the nearly two hundred fifty (250) villages and towns and coordinate the work. Following the discussion of the subject, Dr. Murray stated that this Committee can request to look at emergency planning in more detail; she stated that representatives from the City of Chicago can also be brought in for a more comprehensive report on the subject.

Director Lerner, seconded by Chairman Collens, moved to receive and file the Annual Tuberculosis Surveillance Report of 2012 and the Sexually Transmitted Infections Surveillance Report of 2011. THE MOTION CARRIED UNANIMOUSLY.

V. Recommendations, Discussion/Information Items (continued)

- **B.** Reports from the Medical Staff Executive Committees
 - i. Provident Hospital of Cook County
 - ii. John H. Stroger, Jr. Hospital of Cook County

The report from Dr. Pierre Wakim, President of the Executive Medical Staff (EMS) of Provident Hospital of Cook County, was deferred to the Committee's meeting in October.

Dr. Ozuru Ukoha, President of the EMS of John H. Stroger, Jr. Hospital of Cook County, presented his report on the following subjects that were discussed at the recent EMS meeting: information technology / password change update; residency training; medical staff appointments/reappointments/changes; and site visit to the Burn Unit by the American Burn Association.

In response to a question from Dr. Ukoha regarding subjects of interest to include in the reports from EMS, Chairman Collens stated that future reports should focus more on actions to improve patient safety and quality.

VI. Closed Session Items

- A. **Medical Staff Appointments/Re-appointments/Changes
- **B.** Litigation Matter(s)

The Committee did not recess the regular session and convene in closed session.

VII. Adjourn

As the agenda was exhausted, Chairman Collens declared that the meeting was ADJOURNED.

Respectfully submitted, Quality and Patient Safety Committee of the Board of Directors of the Cook County Health and Hospitals System

Attest:

Deborah Santana, Secretary

Cook County Health and Hospitals System Quality and Patient Safety Committee Meeting Minutes October 9, 2013

ATTACHMENT #1

Culture of Safety Survey

CCHHS Board QPS Meeting 10/9/2013

Culture- A Definition

Healthcare organizations must develop a culture of safety such that an organization's care processes and workforce are focused on improving the reliability and safety of care for patients

-Institute of Medicine

A positive safety culture:

- •Is associated with improved safety performance
- Has been shown to promote staff satisfaction and retention
- Can be improved through multi-component interventions

Joint Commission Standard

Leaders create and maintain a culture of safety and quality throughout the hospital. Rationale:

Safety and quality thrive in an environment that supports teamwork and respect for other people, regardless of their position in the hospital. Leaders demonstrate their commitment to quality and set expectations for those who work in the hospital. Leaders evaluate the culture on a regular basis.

Leaders encourage teamwork and create structures, processes, and programs that allow this positive culture to flourish. Disruptive behavior that intimidates others and affects morale or staff turnover can be harmful to patient care. Leaders must address disruptive behavior of individuals working at all levels of the hospital, including management, clinical and administrative staff, licensed independent practitioners, and governing body members.

DESCRIPTION MOS CR DOC SC ESP 1 Leaders regularly evaluate the culture of safety and quality using valid and reliable tools. 2 Leaders prioritize and implement changes identified by the evaluation. 3 Leaders provide opportunities for all individuals who work in the hospital to participate in safety and quality initiatives.

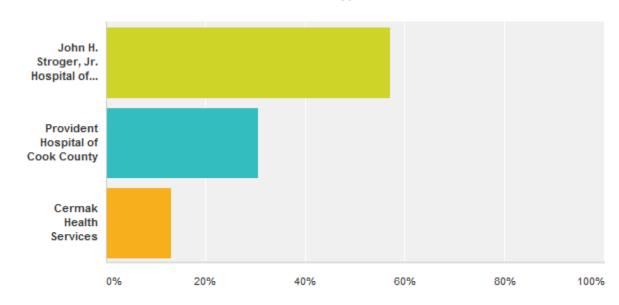
Our Survey

- Based on AHRQ (validated survey)
- Administered internally/ internet based
- Announced to leaders, via posters, and phone messaging
- Facilities: Provident, Stroger, Cermak (inpatient),
 ACHN (outpatient)
- Administered ~ 1month June-July 2013
- 1426 responses across system
- Inpatient data presented

Survey Responses-Inpatient

Please identify your primary unit within the Cook County Health and Hospitals System:



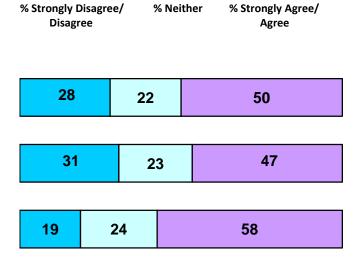


| Answer Choices | Responses | |
|----------------------------------------------|-----------|-----|
| John H. Stroger, Jr. Hospital of Cook County | 56.87% | 414 |
| Provident Hospital of Cook County | 30.36% | 221 |
| Cermak Health Services | 12.91% | 94 |
| Total Respondents: 728 | | |

Non-punitive Response to Error

Survey Items

- R1. Staff feel like their mistakes are held against them.
- R2. When an event is reported, it feels like the person is being written up, not the problem.
- R3. Staff worry that mistakes they make are kept in their personnel file.



% positive: 26%

Supervisor/Manager Expectations & Actions Promoting Patient Safety

Survey Items

- 1. My supervisor/manager says a good word when he/she sees a job done according to established patient safety procedures.
- 2. My supervisor/manager seriously considers staff suggestions for improving patient safety.
- R3. Whenever pressure builds up, my supervisor/ manager wants us to work faster, or take shortcuts.
- R4. My supervisor/manager overlooks patient safety problems that happen over and over.



% Neither

% Strongly Agree/

Agree

% Strongly Disagree/

Disagree

% positive: 60%

Feedback and Communication About Error

Survey Items

- % Never/ % Sometimes % Most of the Rarely time/Always
- 1. We are given feedback about changes put into place based on event reports.
- 29 21 50
- 2. We are informed about errors that happen in this unit.
- 22 13 65
- 3. In this unit, we discuss ways to prevent errors from happening again.



% positive: 60%

Teamwork Within Units

Survey Items

% Strongly Disagree/ % Neither % Strongly Agree/ Disagree Agree

- 1. People support one another in this unit.
- 25 ₁₂ 64
- 2. When a lot of work needs to be done quickly we work together as a team to get the work done.

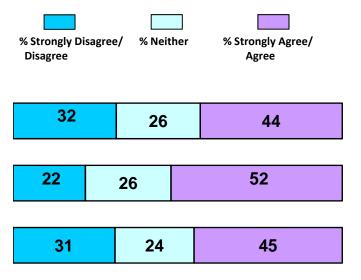


% positive: 66%

Teamwork Across Hospital Units

Survey Items

- 1. There is good cooperation among hospital units that need to work together.
- 2. Hospital units work well together to provide the best care for patients.
- R3. Hospital units do not coordinate well with each other.



% positive: 42%

Major Findings

Staff Perception of Safety

Positive:

- Managers set expectations for safety
- Teamwork within units is good
- There is feedback about safety events

Negative:

- Reluctance to report events due to fear of a punitive response
- Handoffs and communication between hospital units could be improved

Building a Culture of Safety Requirements

- Leadership
- Safety systems
- Occurrence reporting & organizational learning
- Teamwork and communication
- Attitudes
- Job demands and staffing

Leadership and Systems

Current Systems:

- Commitment to safety
- Systems to identify and record adverse events

Future Directions:

- Explicit communications with staff emphasizing safety as a priority
- Weekly safety update to leadership
- Leadership 'walk-rounds'
- Patient safety officer
- Safety councils

Reporting and Organizational Learning

Current Systems:

- On-line secure reporting system with PSO
- Departmental and hospital oversight coupled with process improvement and education (M&M)
- Robust RCA program including front line personnel and emphasis on a non-punitive 'systems' approach

Future Directions:

- Formal recognition of staff who report safety concerns
- Feedback to those who report safety concerns
- Formal feedback from RCA/oversight process to disseminate interventions and 'just culture' concepts¹⁴

Communication & Teamwork

Current Systems:

- Interdisciplinary Rounds: medical-surgical units,
- Communication Training: SBAR, time-outs

• Future Directions:

- Formal interpersonal and teamwork training
- Develop more robust handoff strategies

Questions

Cook County Health and Hospitals System Quality and Patient Safety Committee Meeting Minutes October 9, 2013

ATTACHMENT #2

John H. Stroger, Jr. Hospital of Cook County



Medical Staff Appointments/Reappointments and Non-Medical Staff Action Items Subject to Approval by the CCHHS Quality and Patient Safety Committee

INITIAL APPOINTMENT APPLICATIONS

Bieniarz, Andre, MD Appointment Effective: OB/GYNE/Maternal Fetal Medicine October 9, 2013 thru October 8, 2015 Active Physician

Dominguez, Virginia, DDS Appointment Effective:

Surgery/Oral Health October 9, 2013 thru October 8, 2015 **Active Dentist**

Hinami, Keiki, MD Appointment Effective: Medicine/Collab. Research Unit October 9, 2013 thru October 8, 2015

Active Physician

Kendall, Andrew, DO Appointment Effective:

Emergency Medicine October 9, 2013 thru October 8, 2015 Consulting Physician

Raza, Syed, MD Appointment Effective: Correctional Health Services/Psychiatry October 9, 2013 thru October 8, 2015

Voluntary Physician

Stulberg, Debra, MD Appointment Effective:

Family Medicine/Family Planning October 9, 2013 thru October 8, 2015

Voluntary Physician

Will, Kenneth, MD Appointment Effective: Emergency Medicine/Adult Emergency October 9, 2013 thru October 8, 2015

Consulting Physician

Yamani, Naser, MD Appointment Effective:

Medicine/ACHN

October 9, 2013 thru October 8, 2015

Active Physician

Initial Non-Physician Appointment Applications

Baez, Joseph A., PA-C With Kysia, Rashid Fuad, MD Alternate Sherman, Scott C., MD

Emergency Medicine

Physician Assistant

Effective:

October 09, 2013 thru October 08, 2015

Lueders, Zachary H., PA-C With Sherman, Scott C., MD Alternate Moskoff, Jordan B., MD Effective:

Emergency Medicine

Physician Assistant

Warden-Thomas, Karin A., CNP

Medicine / General Medicine

Nurse Practitioner

Smith, Patrika L., MD

Effective:

October 09, 2013 thru October 08, 2015

October 09, 2013 thru October 08, 2015

REAPPOINTMENT APPLICATIONS

November 15, 2013 thru November 14, 2015

Department of Anesthesiology

Konefal, Tadeusz, MD Reappointment Effective: Clinical Adult Anesthesia

Active Physician

Active Physician

Torres, Maria, MD Reappointment Effective: Pain Management November 18, 2013 thru November 17, 2015

Item IV(B) - October 9, 2013 CCHHS Quality and Patient Safety Committee Meeting

CCHHS APPROVED BY THE QUALITY AND PATIENT SAFETY COMMITTEE

ON OCTOBER 9, 2013

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John H. Stroger, Jr. Hospital of Cook County Reappointment Applications (continued)

<u>Department of Correctional Health Services</u>

De Funiak, Andrew, MD Reappointment Effective:

November 18, 2013 thru November 17, 2015

Active Physician

Department of Emergency Medicine

Thompson, Trevonne, MD Reappointment Effective:

Toxicology

November 20, 2013 thru November 19, 2015

Voluntary Physician

Department of Medicine

Brannegan, Richard T., MD

Neurology Reappointment Effective:

November 18, 2013 thru November 17, 2015

Active Physician

Demetria, Melchor V., MD

Gastroenterology Reappointment Effective:

November 15, 2013 thru November 14, 2015

Active Physician

Huhn, Gregory D., MD Reappointment Effective: Infectious Disease

November 24, 2013 thru November 23, 2015

Active Physician

Margeta, Natasa L., MD Reappointment Effective:

Hospital Medicine

November 24, 2013 thru November 23, 2015

Active Physician

Seo-Lee, Alisa T.L., MD Reappointment Effective:

ACHN

October 21, 2013 thru October 20, 2015

Active Physician

Vettiankal, Gijo G., MD

Reappointment Effective:

Gastroenterology

November 18, 2013 thru November 17, 2015

Active Physician

Department of Obstetrics and Gynecology

Gamble, Tondalaya, MD

Reappointment Effective:

Obstetrics and Gynecology

October 21, 2013 thru October 20, 2015

Active Physician

Rezai, Parto, MD

Reappointment Effective:

Reproductive Endocrinology

October 18, 2013 thru October 17, 2015

Voluntary Physician

Department of Pathology

Niklinski, Waldemar, MD Reappointment Effective: Anatomic Pathology

November 20, 2013 thru November 19, 2015

Active Physician

Department of Pediatrics

Echiveeri, Susan C., MD Reappointment Effective:

Pediatrics Genetic Metabolism

November 13, 2013 thru November 12, 2015

Active Physician

Enger, Minyuen Chang, MD Reappointment Effective:

Neonatology

November 15, 2013 thru November 14, 2015

Active Physician

Fujara, Marjorie R., MD

Child Protective Services

November 16, 2013 thru November 15, 2015

Active Physician

Reappointment Effective:

Adolescent Medicine

Active Physician

Henry-Reid, Lisa M., MD Reappointment Effective: Item IV(B) - October 9, 2013

November 16, 2013 thru November 15, 2015

CCHHS

CCHHS Quality and Patient Safety Committee Meeting

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APPROVED

Page 23 of 10 QUALITY AND PATIENT SAFETY COMMITTEE **ON OCTOBER 9, 2013**

John H. Stroger, Jr. Hospital of Cook County Reappointment Applications

Department of Pediatrics (continued)

Jacobson, Phillip A., MD Reappointment Effective:

Pediatrics/Critical Care Unit

October 21, 2013 thru October 20, 2015

Active Physician

Patel, Mita, MD

ACHN Reappointment Effective:

October 18, 2013 thru October 17, 2015

Active Physician

Romantseva, Lubov F., MD

Reappointment Effective:

Peds Medicine

October 09, 2013 thru October 08, 2015

Voluntary Physician

Soglin, David F., MD

Reappointment Effective:

Pediatric Medicine

November 24, 2013 thru November 23, 2015

Active Physician

Department of Psychiatry

Arenas, Virgilio, MD Reappointment Effective:

Psychiatry

October 21, 2013 thru October 20, 2015

Consulting Physician

Khattak, Samina, MD

Reappointment Effective:

Psychiatry

November 15, 2013 thru November 14, 2015

Active Physician

Department of Radiology

Caluser, Calin, MD

Reappointment Effective:

Special Procedure

November 18, 2013 thru November 17, 2015

Active Physician

Renewal of Privileges for Non-Medical Staff

Kanumury, Ratna P., PA-C With Murray, Linda Rae, MD

Alternate Thomas, Bonnie W., MD With Fegan, Claudia M., MD

Alternate Murray, Linda Rae, MD

Effective:

Medicine / Occ. Medicine/Pulmonary

Physician Assistant

Medicine / General Medicine

Quezada-Gomez, Carlos, PsyD

Effective:

Correctional Health Services/Psychology

October 21, 2013 thru October 20, 2015

October 21, 2013 thru October 20, 2015

Clinical Psychologist

Schoen, Alison M., PA-C With De Funiak, Andrew Q., MD

Alternate Andrew Ting, MD

Effective:

Correctional Health Services

Physician Assistant

December 16, 2013 thru December 15, 2015

Thomas, Barbara, PhD

Effective:

Psychiatry/Adult Ambulatory

November 15, 2013 thru November 14, 2015

Clinical Psychologist

Non-Medical Staff Change in Clinical Privileges

West Paul E. III. PA-C

With Hollowell, Courtney M., MD Alternate Wille, Mark A., MD

Effective:

Surgery / Urology

Physician Assistant

October 09, 2013 thru May 14, 2014

Item IV(B) - October 9, 2013 CCHHS Quality and Patient Safety Committee Meeting

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CCHHS APPROVED

BY THE QUALITY AND PATIENT SAFETY COM Page 24 of 106 ON OCTOBER 9, 2013

Provident Hospital of Cook County



Medical Staff Reappointments and Action Items Subject to Approval by the CCHHS Quality and Patient Safety Committee

INITIAL APPLICATION

Abadin, Shabirhusain, MD Appointment Effective:

General Surgery

Affiliate Physician

October 9, 2013 thru September 22, 2015

REAPPOINTMENT APPLICATIONS

Department of Internal Medicine

Fogelfeld, Leon, MD Reappointment Effective: Internal Medicine/Endocrinology Affiliate Physician

November 24, 2013 thru November 23, 2015

Mallick, Naveed K., MD Reappointment Effective:

Internal Medicine

Active Physician

Rubinstein, Paul G., MD Reappointment Effective:

Internal Medicine/Hema-Oncology October 18, 2013 thru July 27, 2015

October 9, 2013 thru October 8, 2015

Affiliate Physician

Department of Radiology

Javier, Calvin, MD Reappointment Effective: Radiology October 16, 2013 thru October 15, 2015 Active Physician

Marmo, Frank, MD

Radiology

Active Physician

Reappointment Effective:

October 16, 2013 thru October 15, 2015

Cook County Health and Hospitals System Quality and Patient Safety Committee Meeting Minutes October 9, 2013

ATTACHMENT #3

Cook County Department of Public Health

Report to CCHHS Board Quality & Patient Safety Committee

September 23, 2013

- Update on PHAB
- Update on 2015 Strategic Plan
- Update on Quality Activities
- Report on STI's
- Report on Tuberculosis

Linda Rae Murray M.D. MPH FACP Chief Medical Officer, CCDPH







Strategic Plan: VISION 2015

Mission

To deliver integrated health services with dignity and respect regardless of a patient's ability to pay; foster partnerships with other health providers and communities to enhance the health of the public; and advocate for policies which promote and protect the physical, mental and social well being of the people of Cook County.

Vision 2015

In support of its public health mission, CCHHS will be recognized locally, regionally, and nationally —and by patients and employees—as a progressively evolving model for an accessible. integrated, patientcentered, and fiscallyresponsible healthcáre system focused on assuring high-quality care and improving the health of the residents of Cook County.

Core Goals

- I. Access to Healthcare Services
- II. Quality, Service Excellence & Cultural Competence
 - III. Service Line Strength

IV. Staff Development

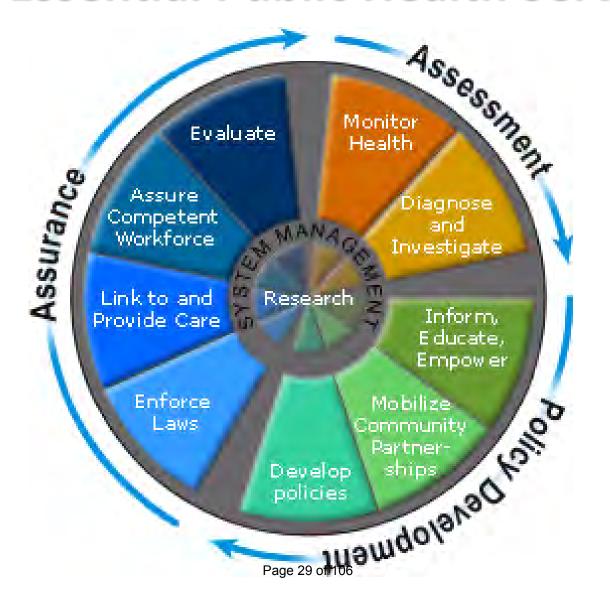
V. Leadership & Stewardship

Strategic Initiatives

- . Eliminate System access barriers at all delivery sites.
- Designate and develop 3-5 regional delivery sites for provision of comprehensive outpatient services.
- Rebuild Fantus Clinic and expand parking capacity; evaluate optimal long-term development of Provident, Oak Forest, and ACHN sites.
- Develop an integrated, System-wide approach and supportive infrastructure for patient-centered care coordination.
- Implement a System-wide program of continuous process improvement: patient care quality, safety, and outcomes.
- . Develop a comprehensive program to instill cultural competency.
- Develop/strengthen clinical service lines in needs-based areas such as cancer, cardiac, diabetes, emergency/trauma, burn, HIV/AIDS, rehabilitation and surgery; evaluate optimal development of OB, pediatrics, neonatal care.
- Pursue mutually beneficial partnerships with community providers.
- Assure the provision of the Ten Essentials of Public Health.
- Implement a full range of initiatives to improve caregiver/employee satisfaction.
- Focus on effective recruiting and retention processes.
- Develop a robust program for in-service education and professional skill building.
- Foster leadership development and succession planning.
- · Develop long-term financial plans and sustaining funding.
- Hold Board and management leadership accountable to agreed-upon performance targets.

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Ten Essential Public Health Services



Cook County Department of Public Health 2015 Strategic Plan

Mission

Vision

To optimize health and achieve health equity for all people and communities of Cook County through our leadership and collaborations, focusing on health promotion and prevention, while advocating for and assuring the natural environmental and social conditions necessary to advance physical, mental and social well-being.

The Cook County Department of Public Health envisions a healthy Cook County where all people and communities thrive in safe, health-promoting conditions.

Values

QUALITY & STEWARDSHIP * DIVERSITY * INTEGRITY * RESPECT *
TEAMWORK * HEALTH EQUITY * PROACTIVE INTERVENTION

Cook County Department of Public Health 2015 Strategic Plan

Mission

To optimize health and achieve health equity for all people and communities of Cook County through our leadership and collaborations, focusing on health promotion and prevention, while advocating for and assuring the natural environmental and social conditions necessary to advance physical, mental and social well-being.

Vision

The Cook County
Department of Public
Health envisions a healthy
Cook County where all
people and communities
thrive in safe, healthpromoting conditions.

Goals

1. Leading Public Health in Cook County

2. Improving Health

3. Achieving Accreditation and Assuring Quality

4. Strengthening Organizational Capacity

Strategic Initiatives

- Examine feasibility of one public health authority in Cook County.
- Increase collaboration and coordination across all six local health departments in Cook County.
- Establish platform to exchange data directly with the Illinois Health Information Exchange.
- Design and implement population health multi-disciplinary teams.
- Direct public health initiatives for the Cook County Health & Hospital System, and integrate CCDPH clinical services.
- Implement Strategic Health Plan, addressing 8 health priorities using evidence-based practice and outcomes measurement.
- Engage multiple sectors and communities in Cook County to address health priorities.
- Apply for national accreditation and promote application by local health departments in Illinois.
- Develop a Quality Assurance Plan and incorporate findings for program changes and staff development.
- Create an organizational culture that encourages staff to increase public health proficiency.
- •Increase modes and quality of internal and external communications.
- •Implement information technology initiatives to enhance productivity.
- Page 31 of 104 dentify new funding opportunities in alignment with mission.

Cook County Department of Public Health 2015 Strategic Plan:

Report on August 2012- August 2013 Activities

Mission

To optimize health and achieve health equity for all people and communities of Cook County through our leadership and collaborations, focusing on health promotion and prevention, while advocating for and assuring the natural environmental and social conditions necessary to advance physical, mental and social well-being.

Goals

1. Leading Public Health in Cook County

Strategic Initiatives

- CCDPH has not been able to implement the specifics of the 2015 plan. We continue to play a leading role in NIPC, NACCHO, IPHA, APHA
- We successfully transferred DENTAL services to ACHN (still providing back office support)
- "Virtual" TB integration at Oak Forest Campus

2. Improving Health

•We remain with our original 4 cross disciplinary teams (Access to Care, CVD, Sexual Health, Violence Prevention) and are unable to add teams as planned. All teams are making progress on their work plans.

•CCDPH established its Community Health Advisory Committee (CHAC) which now has regular meetings.

Vision

The Cook County
Department of Public
Health envisions a healthy
Cook County where all
people and communities
thrive in safe, healthpromoting conditions.

3. Achieving Accreditation and Assuring Quality

- We remain a state certified health department meeting all standards and state inspections and audits. (e.g. CLIA)
- We are on target for national PHAB acrreditation
- The departmental QA committee has been institutionalized with clear work plans for next year.

4. Strengthening Organizational Capacity

- Almost 20% of the department had training in our chosen quality process many earned formal CEs
- About 15% of the department earned CE in a health equity
 Course.

DISCRETIONARY PROGRAMS

REQUIRED FOR COMMUNITY
HEALTH IMPROVEMENT PLAN
Will be discussed another time.

Mandated
Public Health
Services for
Certified Health
Departments in
Illinois 2010

REQUIRED FOR LOCAL HEALTH PROTECTION GRANT

Infectious Disease, Food Protection, Potable Water Supply, Private Sewage disposal

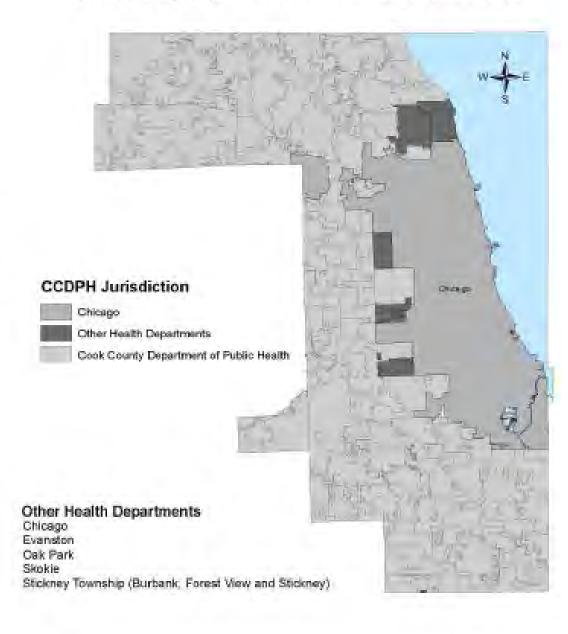
REQUIRED FOR LOCAL HEALTH DEPARTMENT CERTIFICATION:

Emergency Preparedness & Response, Disease Monitoring & Control Services, Community Health Assessment & Planning, Health Communications, Health Data, Quality Improvement and Accreditation, Policy Development, Food & Water Safety, Organizational Management, High Risk Infant Follow-up

Cook County Department of Public Health Jurisdiction

BASIC JURISDICTION

- •All of Cook County EXCEPT where there is a state certified health department.
- Most activities takes place in this geography.



Governance:

Cook County Health & Hospitals Board APPOINTED BY Board President & Ratified by Commissioners

Our day to day management is done as part of the Cook County Health System BOARD OF HEALTH: Cook
County Board of Commissioners
ELECTED BY THE PEOPLE

Cook County
Department of
Public Health

Established in 1945
by Commissioners
who remain our
legal Board of
Health ...from
which our Police
Authority Flows

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Cook County Department of Public Health







Prevent
Communicable
Diseases &
control spread

Environmental Protection

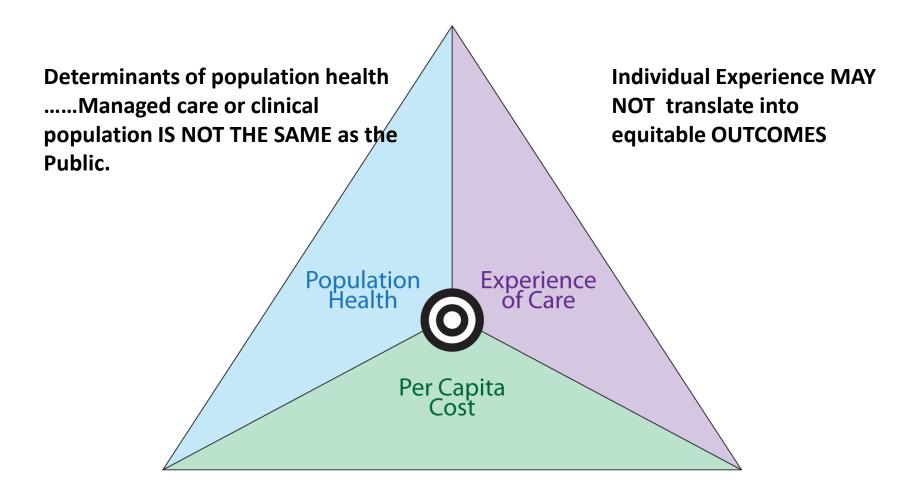
Clinical Programs
(Categorical:STIs,
Family Planning, TB)
Population Based:
High Risk Infants,
Immunization, WIC)

Prevention Services Unit

EPIDEMIOLOGY * EMERGENCY PLANNING & RESPONSE *
POLICY * COMMUNICATIONS

SUPPORT SERVICES: Management * Finances * Human Resources * IT

IHI – Triple Aim of Quality



Decrease in per capita health system costs MAY REQUIRE increase in per capita societal investments 106

PFRFORMANCE MANGEMENT

An integrated system.

For more details review:

TURNING POINT: From Silos to **Systems: Using Performance** Management to Improve the Public's Health.

PERFORMANCE MANAGEMENT: is the practice of actively using performance data to improve the public's health.

A PERFORMANCE MANAGEMENT SYSTEM: is the continuous use of all practices so that they are integrated into an agency's core operations. PM can be carried out at multiple levels.

PERFORMANCE **STANDARDS**

- Identify relevant standards
- Select indicators
- Set goals and targets
- Communicate expectations

PERFORMANCE MEASUREMENT

- Refine indicators and define measures
- Develop data systems
- Collect data

PERFORMANCE MANAGEMENT SYSTEM

Analyze data

OF PROGRESS

REPORTING

- Feed data back to managers, staff, policy makers, constituents
- Develop a regular reporting cycle

QUALITY IMPROVEMENT PROCESS

- Use data for decisions to improve policies, programs and outcomes
- Manage changes
- Create a learning organization

EMBRACING QUALITY IN LOCAL PUBLIC HEALTH



Where

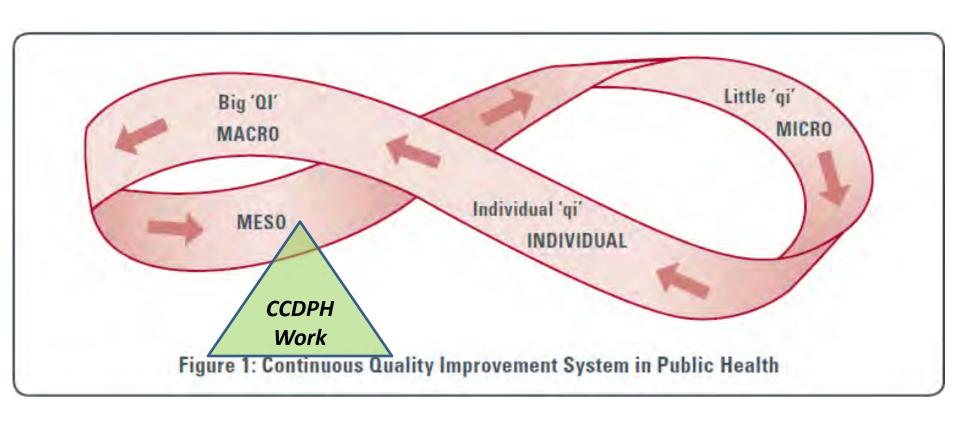
Did

We

Begin?

James A. Butler Angela Martin

Complete System



Summary of QA Committee FY 2012 – August 2013

- Increased knowledge about quality process training over 10% of the department
- Successfully had regular meetings of five teams
- Recognized critical role of "Clueless" team member.
- Many measures "refined" to reflect what we are really trying to improve.

Work plans for FY 2014

- Line staff will be increased on all teams
- Department Committee will be refreshed with more line staff
- Team leaders will expand to include program participants
- Education about quality tools will be driven down to team level.

Summary of Team plans

- Lead: our oldest team. Expanding measures outside of department
- Environmental Health: Were not monitoring these measures before. Amendments Cook County Public Health & Private Nuisance Ordinance passed in July must be addressed.
- CD: stubborn measures. A few interim measures will be added.

Summary of Team Plans

- Tuberculosis: adding measures from national goals. Have "refined" some measures (e.g. IDPH)
- HIGH RISK INFANTS: Has metastasized (a good thing!)
 - Most nurses trained. QA teams being formed in each district and choosing indicators.

Quality Improvement Indicators FY 2013- 14 *Department Level*

| Performance Indicator | Dec 1, 2012 – June 2013 | FY 2013 |
|---------------------------------------------------------------------------------------------------|------------------------------------------|------------------------------------|
| Achieve National Public Health Accreditation through the PHAB (Public Health Accreditation Board) | ON TARGET Submission completed June 2013 | Accreditation by December 31, 2013 |

ON TARGET



Application Prerequisites

- Submit 3 prerequisites (Approved by CCHHS Board & Cook County Board of Commissioners in June 2011)
 - Community Health Assessment (WePlan 2015)
 - Community Health Improvement (WePlan 2015)
 - CCDPH Strategic Plan 2015
- PHAB training of Accreditation Coordinator





7 Steps: PHAB Public Health Accreditation Board

- 7. Reaccreditation
 - 6. Reports
 - 5. Accreditation Decision
 - 4. Site Visit



- 3. Documentation Selection & Submission
 - 2. Application
 - 1. Pre-application





Public Health Accreditation Domains



Quality Improvement Indicators FY 2013 – 14 *Lead Poisoning Prevention*

| Performance Indicator | Dec 1, 2012 -June 2013 | FY 2013 TARGET |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------|
| Percent of cases with elevated blood lead (EBL) visited by a PUBLIC HEALTH NURSE: * EBL 20-39: home visit within 10 business days * EBL 40 – 69: home visit within 5 business days * EBL 70 and greater: home visit within 2 business day | 100% nc 100% | 95% 95% 95% |
| Percent of children with EBLs of 20 or greater that receive <i>a joint home visit</i> from a public health nurse and an environmental inspector | 100% | 95% |
| Proportion of referrals from IDPH Stellar system referred to CCDPH units within 2 days of receipt | 100% | 95% |
| Proportion of <i>mitigation orders</i> that are developed within 10 business days of the environmental inspection | 93% | 95% |

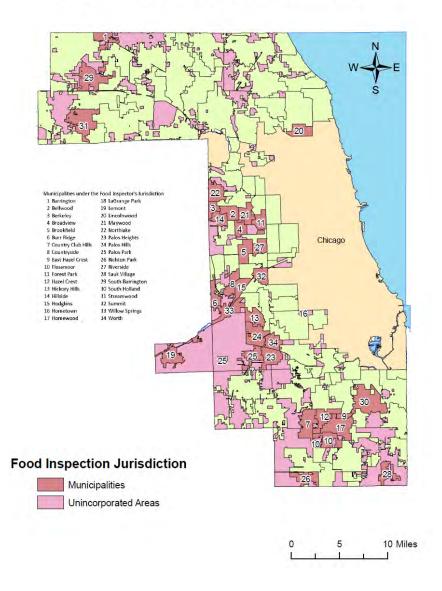
Quality Improvement Indicators FY 2013 – 14 *Lead Poisoning Prevention*

| Performance Indicator | Dec 1, 2012 – May 2013 | FY 2013 TARGET |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|
| Proportion of <i>child care providers</i> in high risk zip codes that are <i>educated</i> on incorporating lead screening & testing policies in their parent handbooks. | 41% | 90% |
| Number of <i>healthcare providers</i> serving children in high risk zip codes that <i>receive education</i> on lead screening policies and Medicaid pay-for-performance incentives for testing. | 19% | 50% |
| Number of private residences that receive mitigation/abatement services to correct lead based paint hazards.* | 20% | 80% |
| * Dependent on grant funding levels | | |

FOOD INSPECTION

- * CCDPH is responsible for food inspections in UNINCORPORATED Cook County
- * CCDPH provides on a CONTRACTED basis food inspections in certain suburban communities.
- *CCDPH is responsible for FOOD BORNE OUTBREAKS OF ILLNESS everywhere in suburban Cook County where there is NOT a state certified local health department.

CCDPH Food Inspection Jurisdiction



Quality Improvement Indicators FY 2013-14

Environmental Health* - Food Program

| Performance Indicators | Dec 1, 2012 - June 2013 | FY 2013 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------|
| Percent of food establishments with isolated illness complaints within non-contract communities that are referred to the appropriate licensing authority within 2 business days. | 83% | 100% |
| Percentage of food establishments with non-illness related complaints (e.g. rodents, odors etc)in contract or unincorporated communities investigated within 5 business days. | 95% | 90% |
| Percentage of food establishments with non-illness related within non-contract communities that are referred to the appropriate licensing authority within 2 business days. | 97% | 100% |

Quality Improvement Indicators FY 2013 -14 Environmental Health* - Nuisance Program

| Performance Indicators | Dec 1, 2012 - June 2013 | FY 2013 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------|
| Percent of nuisance complaints related to failing private sewage disposal systems in suburban Cook County that are investigated within 5 business days of receipt of complaint. | 90% | 100% |
| Percentage of nuisance complaints NOT RELATED to failing private sewage disposal systems in unincorporated suburban Cook County that are investigated within 10 business days of receipt of the complaint. | 97% | 90% |
| Percentage of nuisance complaints determined to be the responsibility of other jurisdictions that are referred to the appropriate agency within 3 business days of receipt of the complaint. | 98% | 100% |

^{*} AMMENDMENTS OF PUBLIC HEALTH & NUISANCE ORDINANCE PASSED IN JULY 2013 WE ARE PREPARING OUR PROCESSES TO BE IN COMPLIANCE WITH DIRECTIVE FROM OUR BOARD OF HEALTH.

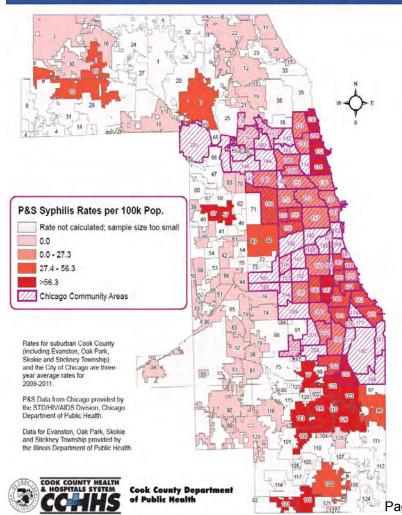
Quality Improvement Indicators FY 2013- 14 *Communicable Disease*

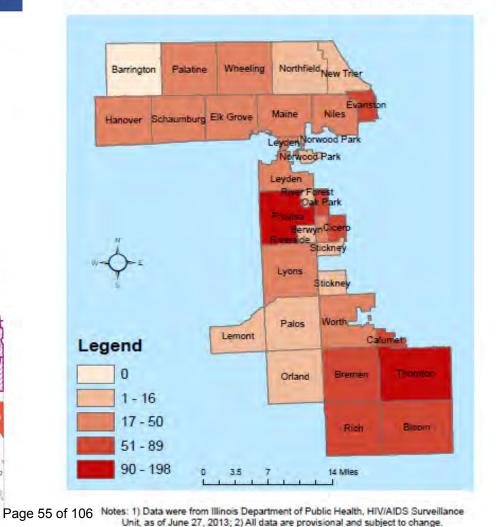
| PERFORMANCE INDICATOR | Dec 1, 2012 – June 2013 | FY2013 |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------|
| Percentage of primary & secondary syphilis cases (P&S) referred to field investigation or assigned final disposition within 3 business days | 100% | 95% |
| Percentage of P&S cases receiving a phone call within 3 business days of field assignment. | 100% | 95% |
| Average Contact per Index case of P&S syphilis | 0.6 | 1.0 |
| Percentage of P&S cases closed within 30 days of field assignment | 87% | 95% |
| Percentage of locatable partners to a confirmed case of P&S syphilis referred for testing and/or treatment. | 73% | 75% |

BIG DOT ISSUE: Suburban Cook is now the epicenter for HIV in state.

Figure 14. Average P&S Syphilis Rates (per 100,000 population by Municipality (Suburban Cook County) and Community Area (Chicago), 2009-2011

Region 8 HIV Incidence by Township, 2008-2012, Illinois





Map was created July 18, 2013

Quality Improvement Indicators FY 2013 – 14 *High Risk Infants*

| Performance Indicators | Dec 1, 2012 - June 2013 | FY 2013 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------------------------|
| Percent of high risk infants referrals received through the APORS (Adverse Pregnancy Outcome Reporting System) that are contacted for follow up by the Public Health Nurse within 14 calendar days of referral. | 33% | 100% |
| CCDPH will identify top ten referral diagnoses from APORS for suburban Cook County | In process | Top ten ICD/9ICD/10 DX identified |
| CCDPH will identify suburban Cook County zip codes with highest rates of top ten referral diagnoses for APORS | Complete | List of Cook County zip codes by ICD/9ICD/10 codes |

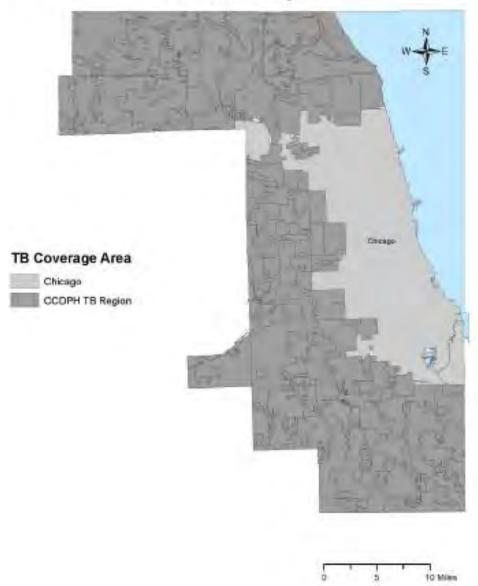
CCDPH JURISDICTION FOR TUBERCULOSIS

- •CCDPH has authority in ALL of suburban Cook County for TB
- •The CCHHS now is responsible to make sure that clinical care is provided to people with TB in the city & suburbs. (Some patients are cared for by private physicians)
- CCDPH strategic plan calls for close coordination and eventual merger of TB clinical activities with the Division of Pulmonary Medicine at Stroger Hospital.

THIS IS ONGOING AND ON TARGET.

•CCDPH will maintain the population based (public health) services as required of a certified health department.

Cook County Department of Public Health Jurisdiction Tuberculosis Region



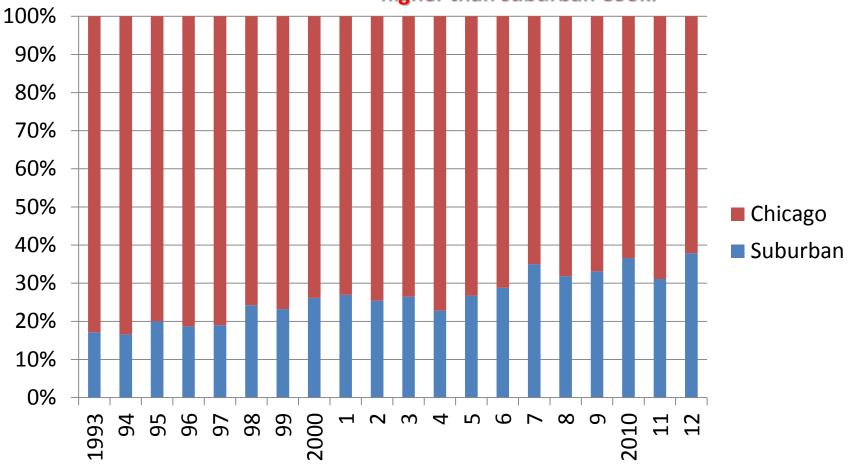
Quality Improvement Indicators FY 2013 – 14 *TUBERCULOSIS*

| PERFORMANCE INDICATOR | Dec 1, 2012 – May 2013 | FY 2013 TARGET |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|------------------------------------------|
| <u>COMPLETION OF RX:</u> For patients with newly diagnosed TB for whom 12 months or less of treatment is indicated increase the proportion of patients who complete treatment within twelve months. | 95% | 93% (National 2015 target) |
| INCREASE HIV TESTING among patients with tuberculosis. | 94% | 90% (National 2015 target = 88.7%) |
| <u>CONVERSION OF SPUTUM CULTURE:</u> Increase the percentage of TB patients which positive sputum culture results who have documented conversion to sputum culture negative within 60 days of treatment initiation. | 91% | 78% (National 2015 target = 60%) |

Tuberculosis in Chicago & Suburban

Cook County

In 1993 the city had a rate FOUR times that of the suburbs. Today the rate is only 1.5 times higher than suburban Cook.



September 2013

Cook County Department of Public Health

Promoting health. Preventing disease.

Protecting you.



2010-2012

Introduction

Overweight and Obesity Prevalence Among School-Aged Children in Suburban Cook County, Illinois

Overweight a

Overweight and obesity among children is a major public health concern in suburban Cook County (SCC), where 40% of 9th graders are already overweight or obese compared to 32% of 9th graders in the U.S.¹

Preventing childhood obesity is important to our children's health and well-being. Children and young people who are obese are likely to be obese as adults² and are at increased risk of developing serious health problems including heart disease, type 2 diabetes, sleep apnea, depression and liver disease³. Obesity in children can have negative social and emotional consequences; for example, teasing and bullying⁴. Additionally, annual medical costs including prescription drug, emergency room, and outpatient costs for obese children in the U.S. are estimated to be \$14.1 billion per year⁵.

To determine the extent and distribution of overweight and obesity among school-aged children in SCC, the Cook County Department of Public Health in collaboration with the Consortium to Lower Obesity in Chicago Children at Ann and Robert H. Lurie Children's Hospital of Chicago conducted an assessment. This brief report shares key findings and recommendations for future efforts.

What was done

Body Mass Index (BMI)ⁱ, calculated using height and weight data recorded from student Certificate of Child Health Examination (CCHE) formsⁱⁱ, was collected from 37,702 students in 129 SCC public schools during school years 2010-11 and 2011-12. Data were available for students in kindergarten, 6th and 9th grades.

Children with age- and sex-adjusted BMI percentile scores of 85 to 94ⁱⁱⁱ are categorized as overweight, and those with scores above 94 are classified as obese. The sampling method used allowed for generalization of overweight and obesity estimates for public school students in SCC by age, grade and region in which they attend school.

Summary of Key Findings



Overall, the overweight and obesity rates in SCC are higher than national averages.



There are significant differences in obesity rates between regions.



Obesity rates in the west, south and southwest regions are higher than national rates.



Acknowledgements

Made possible by cooperative agreements from the Centers for Disease Control and Prevention (Grant Numbers: 1U58DP002623-01 and 3U58DP002623-01S1) to the Public Health Institute of Metropolitan Chicago (PHIMC) and the Cook County Department of Public Health (CCDPH).



Key Finding

Overall, overweight and obesity among SCC students are higher than national averages for children in similar age groups. These differences are statistically is significant for kindergarten and 9th grade.

Table 1 | Overweight and Obesity Rates, School Aged Children, Comparison of Suburban Cook County, Illinois and U.S.

| | Kindergarten (4.5–6.5 years old) | | | | 9th Grade (13.5–15.5 years old) | |
|------|-----------------------------------------|---------|--------------|---------|----------------------------------------|---------|
| | % Overweight | % Obese | % Overweight | % Obese | % Overweight | % Obese |
| SCC | 14.9 | 17.9 | 18.4 | 23.8 | 18.9 | 20.8 |
| U.S. | 11.4 | 12.7 | 18.6 | 20.4 | 15.4 | 16.7 |

U.S. Data Source: National Health and Nutrition Examination Survey (NHANES) data (2005-2010)

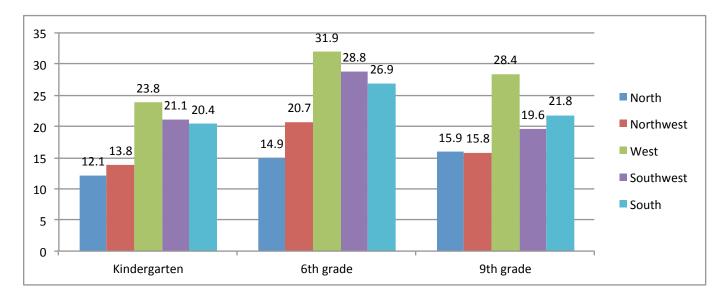


Key Finding

By SCC region, there are statistically significant differences in child obesity rates.

- Obesity rates in the west region of SCC are the highest for all grades.
- Obesity rates in the west, south and southwest regions of SCC are significantly higher than that of the north and northwest regions of SCC.
 - Obesity rates are generally twice as high in the west region of SCC as compared to the rates in the north.
 - Compared to the north region of SCC, obesity rates in the south and southwest regions are nearly 75% higher for kindergartners; over 80% higher for 6th grade students; and over 25% higher for 9th grade students.

Chart 1 | Obesity Rates by Region of Suburban Cook County, Illinois



2010-2012 Overweight and Obesity Prevalence Among School-Aged Children in Suburban Cook County, Illinois



Key Finding

Obesity rates in the west, south and southwest regions of SCC are higher than national rates for children in similar age groups.

- ▶ In the west region of SCC, the obesity rate for kindergartners is nearly twice the national rate; and is 64% and 58% higher, respectively, for 6th and 9th grade students than the national rate.
- ▶ Compared to national rates, obesity rates in the south and southwest regions of SCC are nearly 60% higher for kindergartners; over 85% higher for 6th grade students and nearly 25% higher for 9th grade students.



Recommendations

Childhood obesity affects thousands of children in SCC. Prevention is more cost effective than treatment of obesity. An integral part of the solution to addressing obesity is one that includes implementing policies *and* evidence-based programs that create supportive environments that promote healthy eating and active living.

Additionally, continued monitoring of child overweight and obesity prevalence in SCC is needed. These data, which are the first obesity prevalence rates available specifically for SCC, allow for understanding the extent and distribution of overweight and obesity among school-aged children in SCC. A system for continued surveillance is necessary to inform resource allocation decisions and to monitor progress in reducing overweight and obesity among SCC students.

Definitions

- i. Body Mass Index (BMI) is the relationship of height to weight.
- ii. In Illinois, completed Certificate of Child Health Examination forms (CCHE) forms are required for all public school students by October 15th of their kindergarten, 6th and 9th school years. The CCHE is completed by parents and an authorized health professional. Parents complete a section on family background and chronic conditions. Health care providers provide clinically-measured and diagnosis data including weight and height. Demographics such as age, gender (and as of January 2013, race/ethnicity) are also included.
- iii. Sex- and age-adjusted BMI percentile scores are used to determine weight status because children's growth fluctuates as they age and growth patterns differ by sex and age. Age- and sex-adjusted BMI percentile scores indicate how a child compares to others of the same age and sex. For example, a child with a BMI percentile score of 95 has a BMI greater than 955 of children his same age and sex. Weight status categories are assigned based on percentile scores. BMI percentile scores between 85 and 94 are categorized as overweight. BMI percentile scores equal to or greater than 95 are categorized as obese.
- iv. When differences are described in this report as "statistically significant" or "significantly higher", it means that the likelihood of these differences occurring by chance is small –less than 5%. In other words, if we repeated this analysis 100 times, we are likely to find differences of similar magnitude at least 95 out of 100 times.

References

- 1. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity in the United States, 2009–2010. NCHS data brief, no 82. Hyattsville, MD: National Center for Health Statistics. 2012.
- 2. Guo SS, Chumlea WC. Tracking of body mass index in children in relation to overweight in adulthood. Am J Clin Nutr. Jul 1999;70(1):145S-148S.
- 3. National Institutes of Health. Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults The evidence report. *Obes Res* 6 (Suppl 2): 515–209S. 1998.
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- 5. Trasande L, Chatterjee S. The impact of obesity on health service utilization and costs in childhood. Obesity. 009; 17:1749–54).











September 2013

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2010-2012 School Day Physical Activity Among School-Aged Children in Suburban Cook County, Illinois

Introduction

Overweight and obesity among children is a major public health concern in suburban Cook County (SCC). A recent comparison between national and SCC overweight and obesity prevalence rates by grade specific age groups found SCC rates to be significantly higher. For example, 40% of 9th graders in SCC are already overweight or obese compared to 32% in the U.S. Disparities in overweight and obesity prevalence are also found among regions within SCC where the West and Southwest regions have significantly higher rates.¹

Physical activity (PA), along with proper nutrition, is important in preventing obesity. In addition, PA has many other benefits for children's health and development, such as building and maintaining strong bones and muscles and promoting social and emotional well-being^{2.3}. It further has been linked to improved academic performance.⁴ The Centers for Disease Control and Prevention recommends that children engage in at least one hour of moderate to vigorous physical activity (MVPA) daily to gain health benefits. Moderate PA includes activities such as fast walking; whereas vigorous PA includes activities such as running. Since most U.S. children and youth spend almost half their waking day in school, providing PA opportunities in school settings has the potential to impact the health of most school-aged children and youth. If PA were distributed equally throughout non-sleep hours, we would expect school-aged children and youth in school to engage in at least 28 minutes or 46% of their daily MVPA during a typical 6.5 hour school day.

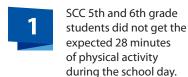
To better understand opportunities for school-based PA interventions that support obesity prevention, the Cook County Department of Public Health collaborated with the Consortium to Lower Obesity in Chicago Children at Ann and Robert H. Lurie Children's Hospital of Chicago to assess school day PA in a sample of 5th and 6th grade students in selected SCC public elementary schools. This brief shares key findings and recommendations for future efforts.

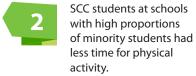
What was done

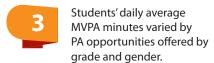
Data on PA during the school day were collected for 1,093 children from two classrooms (either 5th or 6th grade) in each of 14 SCC public schools during the spring of school years 2010-11 and 2011-12. Participating students were accelerometers, which measured PA including time and intensity, for four consecutive school days.

Accelerometer data were categorized by intensity and time spent in PA by intensity level over the course of the school day was summarized for each of the four days. In addition, data were collected on PA opportunities including physical education classes (PE), in-class PA breaks and recess offered on the days on which accelerometer data were collected.

Summary of Key Findings









Acknowledgements

Made possible by cooperative agreements from the Centers for Disease Control and Prevention (Grant Numbers: 1U58DP002623-01 and 3U58DP002623-01S1) to the Public Health Institute of Metropolitan Chicago (PHIMC) and the Cook County Department of Public Health (CCDPH).

2010-2012 School Day Physical Activity Among SchoolAged Children in Suburban Cook County, Illinois



Key Finding

SCC 5th and 6th grade students in the sample did not obtain the expected amount of MVPA (28 minutes) during the school day.

The types of PA opportunities offered in SCC public schools included in the sample varied and included PE classes, recess, and in-class PA breaks. All schools in the sample provided some combination of these opportunities, though not all schools provided all types of PA opportunities. On average, 5th and 6th grade students in the sample had 14 minutes of MVPA during the school day. This is half of the expected school day MVPA.



Key Finding

Students in schools with high proportions of minority students had less school day MVPA time.

- ▶ Students in Hispanic majority schools in the sample had less than half the daily MVPA minutes of students in schools in the sample with a majority of white students (9.8 vs. 21.2 minutes).
- Students in Black majority schools in the sample had 67% fewer daily MVPA minutes than students in schools in the sample with majority of white students (14.2 vs. 21.2 minutes).

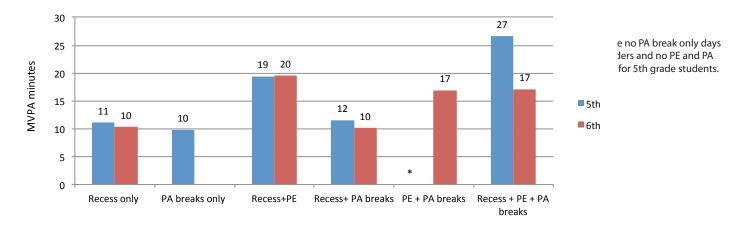


Key Finding

Students' daily average MVPA minutes varied by the combination of PA opportunities offered by grade and gender.

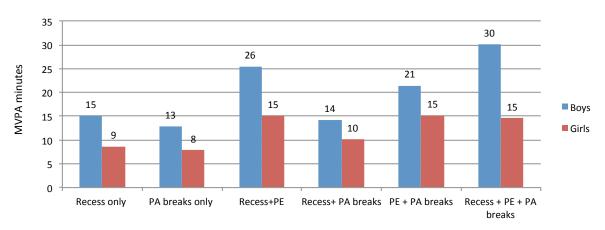
- **By Grade** (for a visual comparison of MVPA minutes by grade, see Chart 1 below)
 - 6th grade students in the sample had the most daily minutes of MVPA (20 minutes) on school days which included recess and PE.
 - 5th grade students in the sample had the most daily minutes of MVPA time (27 minutes) on school days with a combination of recess, PE and in-class PA breaks PA opportunities.

Chart 1 Comparison of 5th and 6th Grade Students' School-Day Daily MVPA Minutes by PA Opportunity Combinations



- **By Gender** (for a visual comparison of MVPA minutes by gender, see Chart 2 below)
 - Boys in the sample acquired the expected MVPA during the school day with a combination of recess, PE and PA breaks; whereas there was no combination of PA opportunities offered that resulted in girls in the sample meeting the expected MVPA during the school day.
 - There was no increase in daily MVPA minutes for girls in the sample on days when PA breaks were added to recess and PE combinations. On days when only recess or PA breaks were offered, girls in the sample had the least amount of daily MVPA minutes.

Chart 2 | Comparison of Boys' and Girls' School-Day Daily MVPA Minutes by PA Opportunity Combinations



Recommendations

PA provides numerous health benefits including obesity prevention. PA has also been shown to contribute to academic achievement even when time for PA decreases instructional time⁴. Given the benefits of PA and the relatively low proportion of school day time spent in MVPA among students in the sample, the findings point to the following recommendations.

- Schools should assess current PA opportunities offered to students and increase the opportunities for students to be physically active, especially in schools with high minority enrollment.
- Schools should use a combination of PA opportunities to support students in reaching daily MVPA expected during the school day.
- ▶ PA opportunities and their combination should be tailored by grade and gender. In the sample, differences were seen in MVPA achievement by grade and gender based on the combination of PA opportunities offered. To guide the combination of PA offerings, schools should consider gathering student input on preferences for PA opportunities.

References

- 1. Brief Report: 2010-2012 Overweight and Obesity Prevalence Among School-Aged Children in Suburban Cook County, Illinois. September 2013.
- 2. U.S. Department of Health and Human Services. Physical Activity Guidelines Advisory Committee report. Washington, DC: U.S. Department of Health and Human Services, 2008.
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For more information









September 2013

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Assessment of School Meals in Suburban Cook County, Illinois

Summary of **Key Findings**



Calories in an average SCC elementary school lunch exceed USDA national nutrition standards.



SCC students' participation in school meals varied by meal and school characteristics.



Meal consumption in the sample of SCC students varied by meal and item.



Acknowledgements

Made possible by cooperative agreements from the Centers for Disease Control and Prevention (Grant Numbers: 1U58DP002623-01 and 3U58DP002623-01S1) to the Public Health *Institute of Metropolitan Chicago (PHIMC)* and the Cook County Department of Public Health (CCDPH).

Introduction

Overweight and obesity among children is a major public health concern in suburban Cook County (SCC). A recent comparison between national and SCC overweight and obesity prevalence rates by grade specific age groups found SCC rates to be significantly higher. For example, 40% of 9th graders in SCC were overweight or obese compared to 32% of children in the U.S. Disparities in overweight and obesity prevalence are also found among regions within SCC where the West and Southwest regions have significantly higher rates.1

Obesity is caused by long-term patterns of imbalance between calories consumed and calories burned. Good nutrition, along with physical activity, is important in preventing obesity. Maintaining a healthy weight includes limiting the number of excess calories consumed through calorie-dense, nutrient-poor foods, including foods high in fat and sugar.

Public school districts in SCC participate in the National School Breakfast and Lunch Programs, federally assisted meal programs administered by the U.S. Department of Agriculture (USDA). The USDA provides subsidies to school districts to support school meal programs that meet USDA requirements. School districts set meal prices and are reimbursed by the USDA for meals served. Students from low-income families qualify for free or reduced price meals.

Most U.S. school children consume school meals. School meal participation rates are generally higher among elementary school students, minorities and students from lowincome households². Due to the high levels of student participation, school meals offer an excellent opportunity to address consumption of excess calories through reduced availability of high calorie, nutrient-poor foods and increased availability of lower calorie nutrient-rich foods, such as low-fat milk, whole grains, fruits and vegetables.

To better understand opportunities for school meal interventions that support obesity prevention, the Cook County Department of Public Health collaborated with the Consortium to Lower Obesity in Chicago Children at Ann and Robert H. Lurie Children's Hospital of Chicago to assess school meal content, student participation, likability, and consumption in a sample of 5th and 6th grade students in 13 SCC public elementary schools. This brief report shares key findings and recommendations for future efforts.

Assessment of School Meals in Suburban Cook County, Illinois

What was done

Student school meal participation, likability and consumption data were collected from 1,086 students in two 5th and/or 6th grade classrooms from each of 13 participating SCC public elementary schools. Using a student school meals questionnaire, data were collected once in school year 2010-11 and again in 2011-12. Data from the questionnaire were highly correlated with school meal sales reported by school food service coordinators. Additionally, nutrition information for each lunch meal served over a one-month period of each school year was collected for each school in the sample.

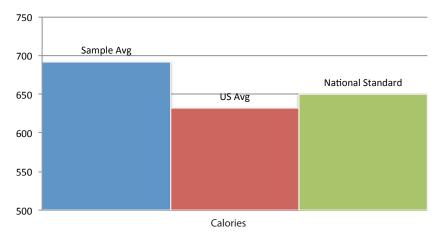


Key Finding

Calories in an average school lunch served at SCC elementary schools in our sample exceeded USDA national nutrition standards for elementary school lunches³.

▶ The average SCC school lunch served at schools in our sample has 692 calories; the current national nutrition standard is 550-650 calories for elementary school lunches.

Chart 1 | Comparison of Average School Lunch Calories





Key Finding

School meal participation in the sample of SCC students varied by meal and school characteristics.

- ▶ Participation in school lunch is significantly higher than for breakfast. In our sample, the participation rate for school breakfast was 37%, which is the same as the national rate. School lunch participation rates among students in our sample are higher than of the national average 85% vs. the national rate of 63%. However, it is known that elementary school children have higher school meal participation rates.² Since our sample included only elementary-aged students, it is likely that student participation rates in SCC are lower.
- ▶ Similar to national trends, schools with large minority student enrollment in the sample (>70% non-Hispanic Black or Hispanic) had higher school meal participation rates 67% for breakfast and 94% for lunch. The higher student participation rates in these sampled schools increases the likelihood that improvements to school meals in these settings will have greater impact by reaching more students.

Assessment of School Meals in Suburban Cook County, Illinois



Key Finding

Meal consumption in the sample of SCC students varied by meal and item.

- ▶ 43% of students in our sample reported consuming half or more of breakfast.
- ▶ 61% of students in our sample reported consuming half or more of lunch.
- ▶ 30% of students in our sample reported eating more than half of vegetables served at either breakfast or lunch the lowest consumption rate for items we tracked.
- ▶ 60% of students in our sample reported eating more than half of fruits served at either breakfast or lunch the highest consumption rate for items we tracked.

Recommendations

Schools can play an integral role in improving student health. Because participation is so high, school meals provide a means to offer lower calorie, nutrient-rich foods to many students. The findings point to three key areas for efforts to improve student diets though school meals.

Increase Student Participation

Increased participation in school meals is desirable because, generally, while school meal nutritional qualities need improvement, they offer superior options compared to other available options including lunches brought from home². For example, a USDA study found that students participating in school lunch eat twice as many servings of vegetables as those not participating in school lunch². Furthermore, students who do not participate in school meals programs are more likely to purchase competitive foods, which typically are of lower nutritional quality than school meals³. Additionally, in some studies, participation in school breakfast has been associated with reduced obesity³.



Student participation is also important to ensure the financial stability of the school meal programs and increase local school districts' capacity for including items with higher nutritional quality. The USDA reimburses school districts per meal served. Economies of scale dictate that larger volumes of meals served can be cost effective and enable schools to afford to serve higher quality foods. Therefore, increasing participation can make improving the nutritional quality of school meals more sustainable at the local level³.

Participation in school breakfast among is much lower than participation in school lunch, and the amount of the breakfast meal consumed is lower than for lunch among students in our sample. Consumption of breakfast is important for student

health, academic performance and obesity prevention⁴. Given this, promotion of school breakfast and working to increase participation and consumption can have a beneficial impact on the health and wellness of students in SCC.

In schools with high minority populations, a primary challenge may be to increase breakfast participation, as lunch participation is already very high. Challenges to breakfast participation include logistics such as requiring students to arrive at school early and increased staffing needs. Some schools have overcome these issues with Universal Breakfast programs offered to all students in classrooms at the start of the school day.

Assessment of School Meals in Suburban Cook County, Illinois

Reduce Calories in School Meals

Currently, the average school lunch meal served by SCC schools in our sample exceeds the national standard for calories. Aligning school lunch meals with this standard would assist in efforts to reduce excess calories in the diets of our children.

Suggested nutrition guidelines can be found on the websites of

- ▶ Alliance for a Healthier Generation at http://www.healthiergeneration.org/schools.aspx
- ▶ HealthierUS School Challenge at http://www.fns.usda.gov/tn/HealthierUS/index.html

Increase Appeal of Healthier Items

In terms of meal item specific improvements, our findings suggest school food service operations should focus on improving the appeal of vegetables served as they are the meal component least likely to be consumed by students and are typically low in calories and nutrient dense, making them a good choice for improving dietary quality. Further, the majority of students in our sample report consuming all or most of fruits served in school meals. This is an area of success, and efforts to maintain this consumption should continue.

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- 3. Story, M. (Editor). (2009). The school food environment, children's diets and obesity: findings from the Third School Nutrition Dietary Assessment Study. Journal of the American Dietetic Association, 109(2), Supplement 1.
- 4. Comparison of Previous and Current Regulatory Requirements under Final Rule "Nutrition Standards in the National School Lunch and School Breakfast Programs" (published January 26, 2012).







Annual Tuberculosis Surveillance Report 2012





Promoting health. Preventing disease. Protecting you.

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ACRONYMS, ABBREVIATIONS & DEFINITIONS

Active TB: (see TB Disease)

BCG: Bacille Calmette Guérin, a vaccination given to persons, usually infants, in countries where TB is common. BCG is NOT used in the United States.

Extrapulmonary TB: A person with *Mycobacterium tuberculosis* infection outside of the lungs, the pleural space, and the larynx (voice box). A person with extrapulmonary disease can also have pulmonary TB (see below).

I-NEDSS: I-NEDSS stands for Illinois-National Electronic Disease Surveillance System. I-NEDSS is a webbased application that establishes a secure and real-time communication link between hospitals, laboratories and other health care providers with state and local health department staff for the purposes of reporting and managing communicable disease information. All TB cases in suburban Cook County are reported to the Illinois Department of Public Health using I-NEDSS.

LTBI: Latent Tuberculosis Infection; a person with TB infection who is not contagious.

MDR-TB: Multi-drug resistant TB. MDR-TB is defined as TB resistant to isoniazid and rifampin, the two most important first line anti-tuberculosis medications.

Pulmonary TB: A person with *Mycobacterium tuberculosis* infection of the lungs, pleural space or the larynx (voice box). A person with pulmonary TB can also have extrapulmonary TB.

QFT-G: QuantiFERON-TB Gold Test, a blood test used to detect *Mycobacterium tuberculosis*. This test cannot distinguish persons with LTBI from persons with TB disease. In contrast to the TST (see below), QFT-G can distinguish persons with either LTBI or TB disease from persons who may have received BCG vaccination. QFT-G has greater specificity than TST.

TB: Tuberculosis

TB Disease: A person with TB infection who is contagious to others; a person with TB disease can have pulmonary TB, extrapulmonary TB, or both.

TST: Tuberculin Skin Test, a test whereby purified protein derivative (PPD) is injected under the skin in the forearm. Persons with TB infection react to the PPD which results in a bump (induration) where the PPD was injected. Qualified healthcare personnel can measure the size of the bump and determine whether the test is positive or negative. A positive TST can indicate active TB infection, LTBI, or prior BCG vaccination. However, the TST is not able to distinguish between these three possibilities.

XDR-TB: Extensively drug resistant TB. XDR-TB is defined as MDR-TB plus TB that is resistant to any fluoroquinoline plus resistance to one of the three injectable drugs (i.e., amikacin, kanamycin, or capreomycin).

OVERVIEW

Epidemiologic Summary

- Eighty nine (89) new cases of TB were reported in suburban Cook County in 2012. This represents a rate of 3.6 cases per 100,000 population, a 20% increase in cases reported in 2011 (Table 1).
- The North District had the highest TB rate (5.9 per 100,000 population) of any of the four public health districts in suburban Cook County (Table 7).
- Municipalities with the highest numbers of cases included Des Plaines (n=10) and Skokie (n=8; Table 7). Each of the following municipalities had four (4) TB cases: Alsip, Glenview, Harvey, Morton Grove and Niles (Table 7).

TB Burden in Foreign-born Persons

- The proportion of TB cases in foreign-born persons was 71% in 2012 (Figure 2).
- Three countries accounted for 62% of all foreign-born cases: India (n=17; 27%), the Philippines (n=12; 19%) and Mexico (n=10, 16%) (Table 3).
- Among foreign-born persons diagnosed with TB, 71% arrived 5 or more years prior to receiving a diagnosis of TB disease (Figure 4).

Drug Resistance

• In 2012, no case of MDR-TB was identified (Table 5).

Coinfection with HIV

• Five (5) TB cases were coinfected with HIV (Table 6); these persons are defined, per AIDS case definition, as having AIDS.

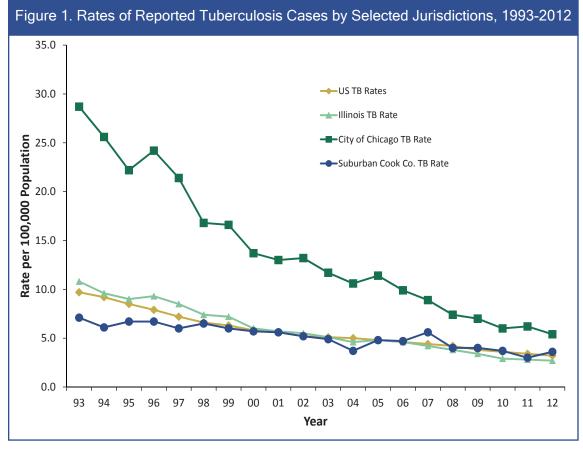
Directly Observed Therapy

• In 2012, 98% of patients with pulmonary TB received DOT (Figure 5).

Completion of Therapy

- For TB cases diagnosed in 2010, the most recent year for which data on completion of tuberculosis therapy are available, 93% of persons with TB disease who were eligible* completed treatment.
- Among persons diagnosed in 2010 who were eligible* to complete TB treatment in 12 months*, 83% of cases did so. This is below the Healthy People 2020 goal of 93% (Figure 6).

^{*} Eligible cases are persons who were alive at the time of TB diagnosis and did not die during therapy, and excludes persons with TB resistant to rifampin and pediatric cases (<15 years) with a diagnosis of meningeal, bone/joint, or miliary TB.



▼Figure 1. TB rates declined from 7.1 per 100,000 population in 1993 to 3.0 per 100,000 population in 2011. In 2012, the rate increased in suburban Cook County to 3.6 per 100,000. TB rates in Chicago and in Illinois declined to 5.4 and 2.7 per 100,000 population, respectively, in 2012.

Table 1. Number and Rate (per 100,000 population) of Reported Tuberculosis Cases by Selected Public Health Jurisdictions, 1993-2012

| | Suburban (| Cook County | City of | Chicago | Illin | nois | US | SA. |
|------|------------|-------------|---------|---------|-------|-------|--------|-------|
| Year | No. | Rate* | No. | Rate* | No. | Rate* | No. | Rate† |
| 1993 | 165 | 7.1 | 798 | 28.7 | 1,235 | 10.8 | 25,107 | 9.7 |
| 1994 | 142 | 6.1 | 714 | 25.6 | 1,101 | 9.6 | 24,205 | 9.2 |
| 1995 | 155 | 6.7 | 619 | 22.2 | 1,024 | 9.0 | 22,728 | 8.5 |
| 1996 | 155 | 6.7 | 674 | 24.2 | 1,060 | 9.3 | 21,210 | 7.9 |
| 1997 | 140 | 6.0 | 597 | 21.4 | 974 | 8.5 | 19,751 | 7.2 |
| 1998 | 150 | 6.5 | 469 | 16.8 | 850 | 7.4 | 18,287 | 6.6 |
| 1999 | 140 | 6.0 | 463 | 16.6 | 825 | 7.2 | 17,501 | 6.3 |
| 2000 | 141 | 5.7 | 398 | 13.7 | 743 | 6.0 | 16,310 | 5.8 |
| 2001 | 139 | 5.6 | 377 | 13.0 | 707 | 5.7 | 15,945 | 5.6 |
| 2002 | 130 | 5.2 | 382 | 13.2 | 680 | 5.5 | 15,056 | 5.2 |
| 2003 | 122 | 4.9 | 339 | 11.7 | 633 | 5.1 | 14,836 | 5.1 |
| 2004 | 91 | 3.7 | 308 | 10.6 | 569 | 4.6 | 14,500 | 5.0 |
| 2005 | 120 | 4.8 | 329 | 11.4 | 596 | 4.8 | 14,067 | 4.8 |
| 2006 | 116 | 4.7 | 287 | 9.9 | 569 | 4.6 | 13,727 | 4.6 |
| 2007 | 139 | 5.6 | 258 | 8.9 | 521 | 4.2 | 13,288 | 4.4 |
| 2008 | 100 | 4.0 | 214 | 7.4 | 469 | 3.8 | 12,904 | 4.2 |
| 2009 | 100 | 4.0 | 202 | 7.0 | 418 | 3.4 | 11,540 | 3.8 |
| 2010 | 93 | 3.7 | 161 | 6.0 | 372 | 2.9 | 11,181 | 3.6 |
| 2011 | 75 | 3.0 | 166 | 6.2 | 359 | 2.8 | 10,521 | 3.4 |
| 2012 | 89 | 3.6 | 146 | 5.4 | 347 | 2.7 | 9,951 | 3.2 |

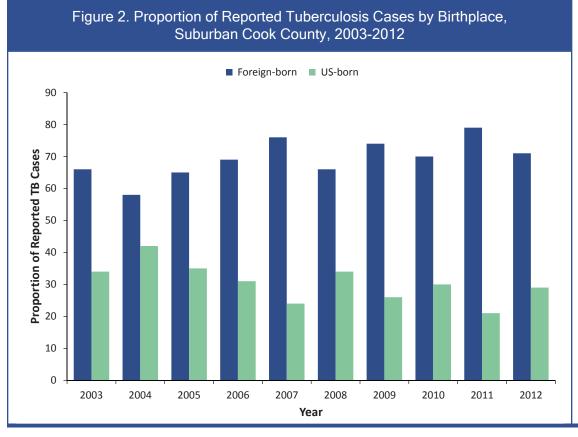
^{*} Rates (per 100,000 population) for years 1993-1999 calculated using 1990 US census data; rates for 2000 - 2009 calculated using 2000 US census data. Rates for 2010-2012 calculated using 2010 US census data.

[†] US rates calculated using intercensal estimates from the US Census Bureau.

Table 2. Number and Percentage of Reported Tuberculosis Cases by Selected Characteristics, Suburban Cook County, 2003-2012

| | | | | | | | | Ye | ar | | | | | | | | | | | |
|------------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| | 20 | 003 | 20 | 004 | 20 | 05 | 20 | 006 | 20 | 07 | 20 | 800 | 20 | 09 | 20 | 010 | 20 | 011 | 20 |)12 |
| Characteristic | No. | (%) |
| Sex | | | | | | | | | | | | | | | | | | | | |
| Male | 70 | (57) | 53 | (58) | 57 | (48) | 64 | (55) | 73 | (52) | 58 | (58) | 47 | (47) | 51 | (55) | 41 | (55) | 50 | (56) |
| Female | 52 | (43) | 38 | (42) | 63 | (53) | 52 | (45) | 67 | (48) | 42 | (42) | 53 | (53) | 42 | (45) | 34 | (45) | 39 | (44) |
| Age Groups (Y) | | | | | | | | | | | | | | | | | | | | |
| <5 | 1 | (1) | 1 | (1) | 3 | (3) | 4 | (3) | 3 | (2) | 2 | (2) | 2 | (2) | 2 | (2) | 1 | (1) | 4 | (4) |
| 5-14 | 1 | (1) | 0 | (0) | 3 | (3) | 4 | (3) | 2 | (1) | 1 | (1) | 0 | (0) | 0 | (0) | 2 | (3) | 0 | (0) |
| 15-24 | 17 | (14) | 5 | (5) | 15 | (13) | 7 | (6) | 14 | (10) | 4 | (4) | 13 | (13) | 9 | (10) | 6 | (8) | 10 | (11) |
| 25-44 | 38 | (31) | 31 | (34) | 43 | (36) | 36 | (31) | 32 | (23) | 40 | (40) | 40 | (40) | 24 | (26) | 24 | (32) | 18 | (20) |
| 45-64 | 44 | (36) | 33 | (36) | 31 | (26) | 35 | (30) | 58 | (41) | 30 | (30) | 22 | (22) | 29 | (31) | 21 | (28) | 34 | (38) |
| 65+ | 21 | (17) | 21 | (23) | 25 | (21) | 30 | (26) | 31 | (22) | 23 | (23) | 23 | (23) | 29 | (31) | 21 | (28) | 23 | (26) |
| Race/Ethnicity | | | | | | | | | | | | | | | | | | | | |
| White, not Hispanic | 28 | (23) | 23 | (25) | 21 | (18) | 19 | (16) | 27 | (19) | 21 | (21) | 14 | (14) | 14 | (15) | 10 | (13) | 22 | (25) |
| Black, not Hispanic | 30 | (25) | 19 | (21) | 30 | (25) | 19 | (16) | 16 | (11) | 24 | (24) | 10 | (10) | 11 | (12) | 13 | (17) | 13 | (15) |
| Hispanic | 19 | (16) | 21 | (23) | 24 | (20) | 25 | (22) | 28 | (20) | 17 | (17) | 24 | (24) | 31 | (33) | 20 | (27) | 15 | (17) |
| Asian/Pacific Islander | 45 | (37) | 28 | (31) | 45 | (38) | 53 | (46) | 69 | (49) | 38 | (38) | 45 | (45) | 37 | (40) | 32 | (43) | 39 | (44) |
| Other | 0 | (0) | 0 | (0) | 0 | (0) | 0 | (0) | 0 | (0) | 0 | (0) | 7 | (7) | 0 | (0) | 0 | (0) | 0 | (0) |
| TOTAL | 122 | (100) | 91 | (100) | 120 | (100) | 116 | (100) | 140 | (100) | 100 | (100) | 100 | (100) | 93 | (100) | 75 | (100) | 89 | (100) |

▲ Table 2. In 2012, 56% of TB cases were male; 83% were aged 25 years or older; 44% were Asian/Pacific Islanders. In 2012, there were 4 pediatric cases (i.e. cases <15 years of age) diagnosed in suburban Cook County.



▼Figure 2. The proportion of TB cases in foreign-born persons was 71% in 2012.

▶ Figure 3. Important race/ ethnicity differences exist in the distribution of cases by birthplace. Among foreignborn persons, Asian/Pacific Islanders accounted for the majority (60%) of cases. By comparison, non-Hispanic Whites accounted for the highest proportion of cases (50%) among U.S.-born TB cases.

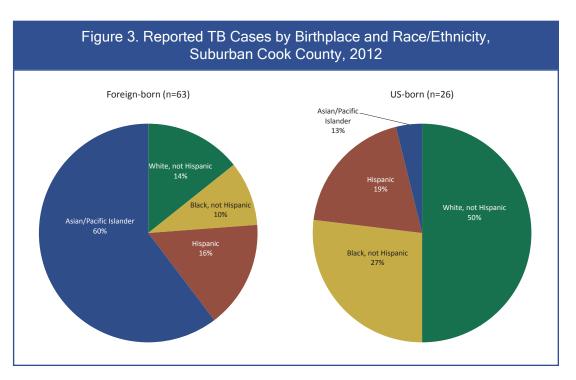
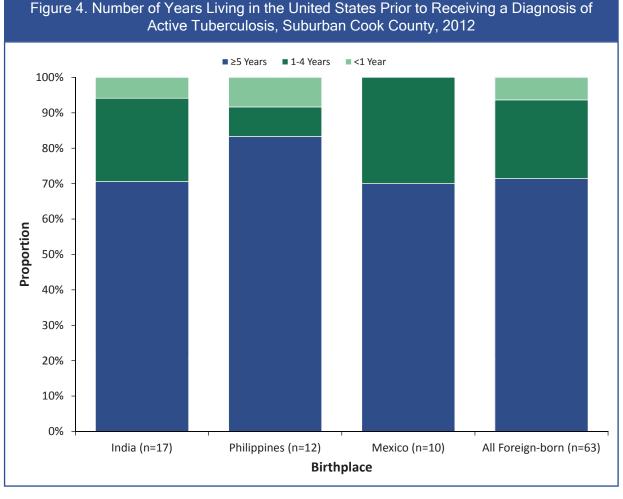


Table 3. Tuberculosis Cases by Most Frequently Reported Countries of Origin, Suburban Cook County, 2003 - 2012

| | | | | | Ye | ear | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|-------|
| Birthplace | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012* |
| India | 16 | 13 | 24 | 23 | 30 | 10 | 18 | 20 | 18 | 17 |
| Mexico | 14 | 13 | 19 | 18 | 18 | 11 | 17 | 21 | 17 | 10 |
| Philippines | 13 | 10 | 12 | 16 | 21 | 17 | 11 | 8 | 5 | 12 |
| Poland | 3 | 3 | 3 | 1 | 4 | 2 | 2 | 1 | 6 | 6 |
| Korea South | 2 | 2 | 4 | 2 | 5 | 1 | 2 | 2 | 1 | 0 |
| Pakistan | 2 | 1 | 1 | 1 | 5 | 1 | 3 | 0 | 0 | 2 |
| China | 3 | 1 | 0 | 4 | 1 | 4 | 2 | 2 | 0 | 2 |
| Vietnam | 3 | 0 | 1 | 2 | 1 | 2 | 6 | 1 | 2 | 1 |
| Nigeria | 4 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 3 | 0 |
| Haiti | 3 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 2 |
| Romania | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 1 | 1 |
| Russia | 1 | 0 | 1 | 0 | 1 | 2 | 0 | 1 | 1 | 0 |
| Thailand | 1 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 |
| Guatemala | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Mongolia | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 3 |
| Myanmar (formerly Burma) | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| Peru | 1 | 1 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 0 |
| Ukraine | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |

^{*}Cases were also counted in persons born in Algeria, Bulgaria, Central African Republic, Ethiopia, Germany, Ghana and Indonesia.

▼Table 3. In 2012, 63 foreign-born persons with active TB came from 17 different countries. Three countries of origin accounted for 62% of all foreign born cases: India (n=19; 27%), the Philippines (n=12; 19%) and Mexico (n=10; 16%).



◆Figure 4.
Among all foreign-born TB cases reported in 2012, 71% arrived in the U.S. 5 or more years prior to receiving a diagnosis of TB disease.

Table 4. Number and Proportion of Reported Tuberculosis Cases by Site of Disease and Laboratory Results, Suburban Cook County, 2012

| | Total Cases | Sputum Sm | ear Positive | Culture positive | | |
|---------------------|-------------|-----------|--------------|------------------|------|--|
| Site of Disease | No. | No. | (%) | No. | (%) | |
| Pulmonary Only | 55 | 19 | (35) | 29 | (53) | |
| Extrapulmonary Only | 25 | 0 | (0) | 0 | (0) | |
| Both | 9 | 2 | (0) | 4 | (44) | |
| Total | 89 | 21 | (24) | 33 | (37) | |

▼Table 4. Fifty five (55) reported TB cases in 2012 had pulmonary only TB; 25 cases had extrapulmonary only TB (no pulmonary involvement). Fifty three percent (53%) of pulmonary only TB cases cases were culture positive.

▶ Table 5. Fifty nine (59) cases in 2012 had susceptibility testing performed. There were no cases of MDR-TB or XDR-TB in suburban Cook County in 2012.

| Cases with Susceptibility | Any | Drug | | | | |
|------------------------------|---------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Results | Resis | tance | INH-Re | sistant | MD | R-TB |
| No. | No. | (%) | No. | (%) | No. | (%) |
| 44 | 4 | (9) | 2 | (5) | 0 | (0) |
| 15 | 1 | (7) | 1 | (7) | 0 | (0) |
| 59 | 11 | (19) | 4 | (7) | 0 | (0) |
| | Cases with Susceptibility Results No. 44 15 | Cases with Susceptibility Any Results Resis No. No. 44 4 15 1 | Cases with Susceptibility Any Drug Results Resistance No. No. (%) 44 4 (9) 15 1 (7) | Cases with Susceptibility Any Drug Results Resistance INH-Re No. No. (%) No. 44 4 (9) 2 15 1 (7) 1 | Cases with Susceptibility Any Drug Results Resistance INH-Resistant No. No. (%) No. (%) 44 4 (9) 2 (5) 15 1 (7) 1 (7) | Susceptibility Results Any Drug Resistance INH-Resistant MD No. No. (%) No. (%) No. 44 4 (9) 2 (5) 0 15 1 (7) 1 (7) 0 |

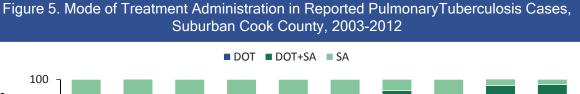
Table 5. Tuberculosis Susceptibility Results by Birthplace,

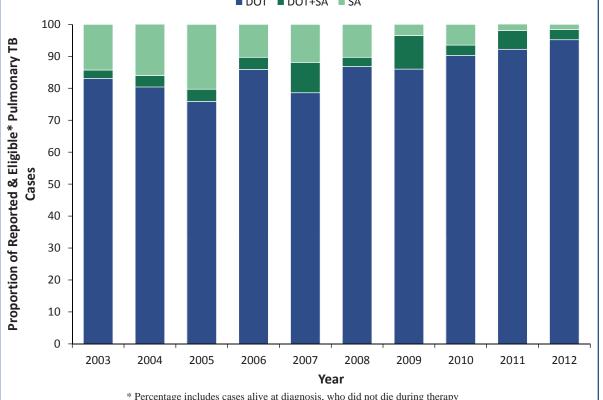
▶ Table 6. Testing for HIV among reported cases of TB increased from 73% in 2003 to 88% in 2012. Five (5) cases were coinfected in 2012. Persons with TB and HIV coinfection are classified, by AIDS surveillance case definition, as having AIDS.

Table 6. Trends in the Number of Reported Tuberculosis Cases, HIV Testing and Coinfection with HIV, Suburban Cook County, 2003-2012

| _ | TB Cases | Tested | for HIV | Coinfected | d with HIV* |
|------|----------|--------|---------|------------|-------------|
| Year | No. | No. | (%) | No. | (%) |
| 2003 | 122 | 89 | (73) | 7 | (8) |
| 2004 | 91 | 75 | (82) | † | + |
| 2005 | 120 | 94 | (78) | 6 | (6) |
| 2006 | 116 | 85 | (73) | † | + |
| 2007 | 139 | 109 | (78) | 6 | (6) |
| 2008 | 100 | 87 | (87) | 9 | (10) |
| 2009 | 100 | 77 | (77) | 5 | (6) |
| 2010 | 93 | 72 | (77) | 0 | (0) |
| 2011 | 75 | 67 | (89) | + | + |
| 2012 | 89 | 78 | (88) | 5 | (6) |

^{*} Persons with HIV who receive a TB diagnosis are defined as having AIDS.

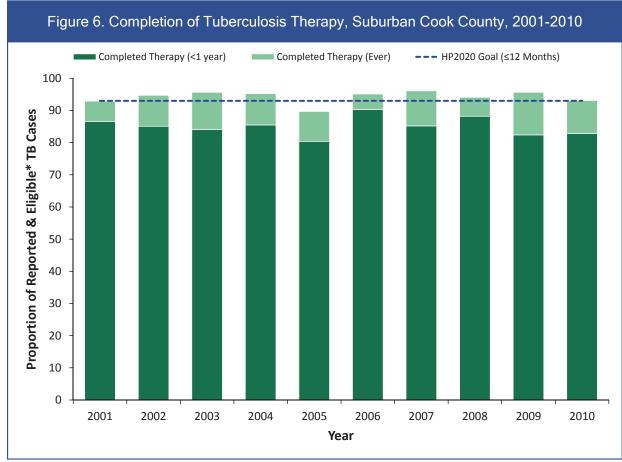




* Percentage includes cases alive at diagnosis, who did not die during therapy with one or more anti-tuberculosis drugs prescribed and excludes persons with missing or unknown information regarding mode of treatment administration.

▼Figure 5. The proportion of TB cases receiving directly observed therapy (DOT), whether DOT only or DOT with some self-administered (SA) therapy has increased over time. The proportion of pulmonary TB cases receiving directly observed therapy (DOT only or DOT+SA) increased from 86% in 2003 to 98% in 2012.

[†] Cells with small counts (1-4) have been suppressed.



▼Figure 6. In 2010, the most recent year for which data on completion of tuberculosis therapy are available, 93% of reported TB cases who were eligible* completed treatment.

In 2010, 83% of eligible* persons completed treatment in less than one year. This is below the Department of Health and Human Services Healthy People 2020 goal of 93%.

^{*} Eligible cases are persons who were alive at the time of TB diagnosis and did not die during therapy, and excludes persons with TB resistant to rifampin and pediatric cases (<15 years) with a diagnosis of meningeal, bone/joint, or miliary TB.

Table 7. Reported Tuberculosis Case Rates (per 100,000 population) by Municipality and District, Suburban Cook County, 2012

| NORTH | 1 | | WE | ST | | | SOU | TH | | | SOUTHV | /EST | |
|-------------------|-----|------|------------------|-----|---|------|--------------------|-----|----|------|------------------|------|------|
| City | No. | Rate | City | No. | F | Rate | City | No. | Ra | ate | City | No. | Rate |
| Arlington Heights | 1 | 1.3 | Bellwood | | 0 | 0.0 | Burnham | | 0 | 0.0 | Alsip | 4 | 20.8 |
| Barrington | 1 | 17.8 | Bensenville | | 0 | 0.0 | Calumet City | | 2 | 5.4 | Bedford Park | 0 | 0.0 |
| Barrington Hills | 0 | 0.0 | Berkeley | | 1 | 39.9 | Chicago Heights | | 1 | 3.3 | Blue Island | 0 | 0.0 |
| Bartlett | 0 | 0.0 | Berwyn | | 1 | 1.8 | Country Club Hills | | 0 | 0.0 | Bridgeview | 0 | 0.0 |
| Buffalo Grove | 1 | 7.3 | Broadview | | 0 | 0.0 | Dixmoor | | 0 | 0.0 | Burbank | 0 | 0.0 |
| Des Plaines | 10 | 17.1 | Brookfield | | 0 | 0.0 | Dolton | | 1 | 4.3 | Calumet Park | 0 | 0.0 |
| Elgin | 0 | 0.0 | Burr Ridge | | 0 | 0.0 | East Hazel Crest | | 0 | 0.0 | Chicago Ridge | 0 | 0.0 |
| Elk Grove Village | 1 | 3.0 | Cicero | | 3 | 3.6 | Flossmoor | | 0 | 0.0 | Crestwood | 0 | 0.0 |
| Evanston | 3 | 4.0 | Countryside | | 0 | 0.0 | Ford Heights | | 0 | 0.0 | Evergreen Park | 0 | 0.0 |
| Glencoe | 0 | 0.0 | Elmwood Park | | 0 | 0.0 | Glenwood | | 0 | 0.0 | Forest View | 0 | 0.0 |
| Glenview | 4 | 9.0 | Forest Park | | 0 | 0.0 | Harvey | | 4 | 15.8 | Hickory Hills | 0 | 0.0 |
| Golf | 0 | 0.0 | Franklin Park | | 2 | 10.9 | Hazel Crest | | 0 | 0.0 | Hometown | 0 | 0.0 |
| Hanover Park | 1 | 4.8 | Harwood Heights | | 0 | 0.0 | Homewood | | 0 | 0.0 | Justice | 0 | 0.0 |
| Hoffman Estates | 2 | 3.9 | Hillside | | 0 | 0.0 | Lansing | | 0 | 0.0 | Lemont | 1 | 6.3 |
| Inverness | 0 | 0.0 | Hinsdale | | 0 | 0.0 | Lynwood | | 0 | 0.0 | Merrionette Park | 0 | 0.0 |
| Kenilworth | 0 | 0.0 | Hodgkins | | 0 | 0.0 | Markham | | 1 | 8.0 | Oak Lawn | 0 | 0.0 |
| Lincolnwood | 1 | 7.9 | Indian Head Park | | 0 | 0.0 | Matteson | | 0 | 0.0 | Orland Hills | 0 | 0.0 |
| Morton Grove | 4 | 17.2 | La Grange | | 0 | 0.0 | Midlothian | | 0 | 0.0 | Orland Park | 3 | 5.3 |
| Mount Prospect | 3 | 5.5 | La Grange Park | | 0 | 0.0 | Oak Forest | | 2 | 7.2 | Palos Heights | 0 | 0.0 |
| Niles | 4 | 13.4 | Lyons | | 0 | 0.0 | Olympia Fields | | 0 | 0.0 | Palos Hills | 2 | 11.4 |
| Northbrook | 1 | 3.0 | Maywood | | 0 | 0.0 | Park Forest | | 0 | 0.0 | Palos Park | 0 | 0.0 |
| Northfield | 0 | 0.0 | McCook | | 0 | 0.0 | Phoenix | | 0 | 0.0 | Stickney | 0 | 0.0 |
| Palatine | 0 | 0.0 | Melrose Park | | 0 | 0.0 | Posen | | 0 | 0.0 | Summit | 0 | 0.0 |
| Park Ridge | 1 | 2.7 | Norridge | | 0 | 0.0 | Richton Park | | 0 | 0.0 | Willow Springs | 0 | 0.0 |
| Prospect Heights | 0 | 0.0 | North Riverside | | 0 | 0.0 | Riverdale | | 1 | 7.4 | Worth | 0 | 0.0 |
| Rolling Meadows | 2 | 8.3 | Northlake | | 1 | 8.1 | Robbins | | 0 | 0.0 | | | |
| Roselle | 0 | 0.0 | Oak Park | | 0 | 0.0 | Sauk Village | | 0 | 0.0 | | | |
| Schaumburg | 2 | 2.7 | River Forest | | 0 | 0.0 | So. Chicago Hts | | 0 | 0.0 | | | |
| Skokie | 8 | 12.3 | River Grove | | 0 | 0.0 | South Holland | | 1 | 4.5 | | | |
| South Barrington | 0 | 0.0 | Riverside | | 0 | 0.0 | Steger | | 0 | 0.0 | | | |
| Streamwood | 2 | 5.0 | Rosemont | | 0 | 0.0 | Thornton | | 0 | 0.0 | | | |
| Wheeling | 2 | 5.3 | Schiller Park | | 0 | 0.0 | Tinley Park | | 2 | 4.1 | | | |
| Wilmette | 1 | 3.7 | Stone Park | | 0 | 0.0 | University Park | | 0 | 0.0 | | | |
| Winnetka | 0 | 0.0 | Westchester | | 1 | 6.0 | | | | | | | |
| | | | Western Springs | | 0 | 0 | | | | | | | |
| Total | 55 | 5.9 | Total | | 9 | 1.8 | Total | 1 | L5 | 3.2 | Total | 10 | 2.7 |

Rates per 100,000 population per year. Rates calculated using 2010 Census data. Use caution when interpreting rates where the count is < 20.

TECHNICAL NOTES

Surveillance Methodology

Healthcare providers and laboratories in suburban Cook County are required to report the following results within 24 hours: (1) sputum or tissue smears positive for acid-fast bacilli (AFBs); (2) cultures positive for *Mycobacterium tuberculosis*; (3) mycobacterial drug susceptibility results; (4) any other tests positive for *Mycobacterium tuberculosis*. In addition, confirmed TB cases must be reported to CCDPH within 7 days.

TB case reports are entered into I-NEDSS and provide the basis for the information presented in this report. This report includes all cases of tuberculosis reported during the year in which the case was confirmed. Confirmed TB cases who may have moved into suburban Cook County from another jurisdiction are not reflected in the data presented herein; such cases are counted in the jurisdiction that reported the case. Likewise, confirmed TB cases reported in suburban Cook County who may have moved out of suburban Cook County are included in the data presented herein.

Reported TB Case Rates

Suburban Cook County, Chicago and Illinois TB rates between 1993-1999 were calculated using 1990 census data. Suburban Cook County, Chicago and Illinois TB rates between 2000-2009 were calculated using 2000 census data. Suburban Cook County, Chicago and Illinois TB rates after 2009 were calculated using 2010 census data. National TB rates were calculated using national intercensal estimates.

Sexually Transmitted Infections Surveillance Report, 2011





COOK COUNTY DEPARTMENT OF PUBLIC HEALTH

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ABBREVIATIONS, ACRONYMS & DEFINITIONS

CCDPH: Cook County Department of Public Health. Jurisdiction includes all areas in Cook County, Illinois excluding Chicago, Evanston, Oak Park, Skokie, and Stickney Township.

CDC: Centers for Disease Control and Prevention.

HIV: Human Immunodeficiency Virus, the virus that causes Acquired Immunodeficiency Syndrome (AIDS).

HP2020: Healthy People 2020. A U.S. Health and Human services-sponsored statement of national health objectives aimed at identifying the most significant preventable threats to health and establishing national goals to reduce these threats.

MSM: Male-to-male sexual contact.

P&S SYPHILIS: Primary and secondary stages of syphilis, highly infectious stages.

STI: Sexually Transmitted Infection. Generally, this refers to chlamydia (*Chlamydia trachomatis*), gonorrhea (*Neisseria gonorrhoea*) or syphilis (*Treponema pallidum*) infection.

REPORT HIGHLIGHTS

CHLAMYDIA

- In suburban Cook County, the 2011 chlamydia rate was 370.4 per 100,000 population.
- In 2011, two-thirds of reported chlamydia cases were minorities: 50.4% of cases were non-Hispanic Black and 17.1% were Hispanic.
- The chlamydia rate for non-Hispanic Blacks (1,143.3 per 100,000 population) in 2011 was 16 times higher than the rate in non-Hispanic Whites (70.7 per 100,000 population) and 3.5 times higher than the rate in Hispanics (327.9 per 100,000 population).
- Chlamydia rates among females were 2,272.7 and 1,845.4 per 100,000 population among those aged 20-24 years and 15-19 years, respectively.

GONORRHEA

- In suburban Cook County, the 2011 gonorrhea rate was 91.2 per 100,000 population.
- The average gonorrhea rate in females aged 15-44 years was 246.5 per 100,000 population, lower, overall, than the HP2020 goal of 257.0 per 100,000 population for this age group; however, rates were not uniform and were highest in females aged 20-24 years (609.3 per 100,000 population) and in females aged 15-19 years (571.5 per 100,000 population).
- The average gonorrhea rate in males aged 15-44 years was 205.5 per 100,000 population, slightly higher than the HP2020 goal of 198.0 per 100,000 population for this age group; like females, however, rates were not uniform and were highest in males aged 20-24 years (458.5 per 100,000 population) and in males aged 15-19 (287.8 per 100,000 population).
- The 2011 gonorrhea rate in non-Hispanic Blacks (394.7 per 100,000 population) was 43 times higher than the gonorrhea rate in non-Hispanic Whites (9.1 per 100,000 population) and nearly 15 times higher than the rate in Hispanics (26.8 per 100,000 population).

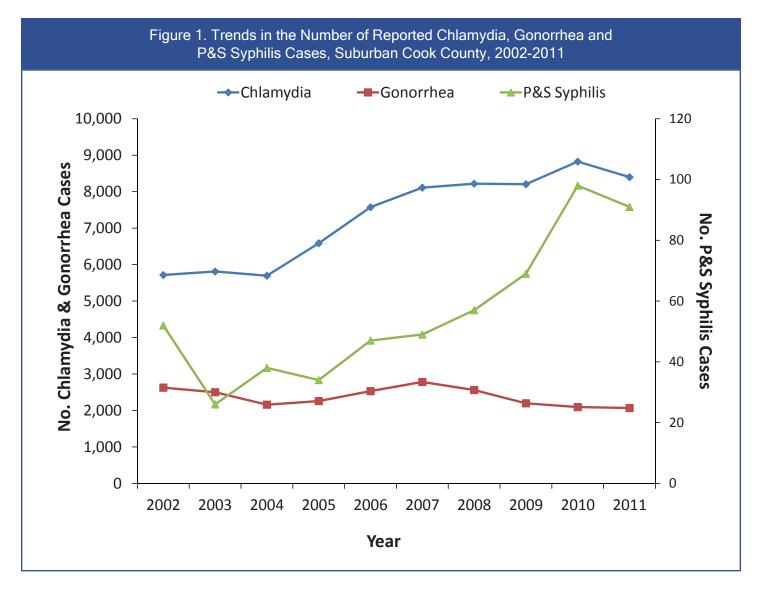
PRIMARY AND SECONDARY (P&S) SYPHILIS

- In suburban Cook County, the 2011 P&S syphilis rate was 4.0 per 100,000 population.
- In 2011, 91.2% of P&S syphilis cases were male, corresponding to a rate of 7.6 per 100,000 population, higher than the HP2020 goal of 6.8 per 100,000 population; the P&S syphilis rate in females was 0.7 per 100,000 population, below the HP2020 goal of 1.5 per 100,000 population.
- In 2011, 70% of reported P&S syphilis cases were non-Hispanic Black; 14.3% were non-Hispanic White and 13.2% were Hispanic.

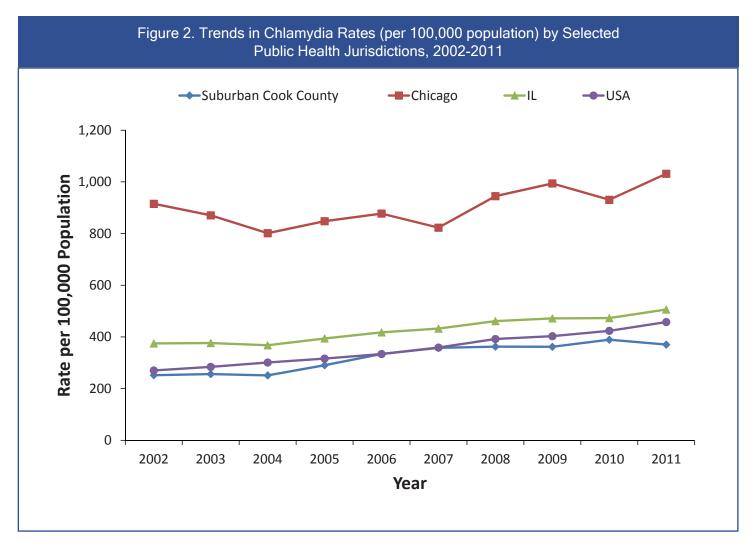
Table 1. Number and Rate (per 100,000 population) of Reported Chlamydia, Gonorrhea and P&S Syphilis Cases by Year, Suburban Cook County, 2007-2011

| | 2007 | | 20 | 08 | 20 | 09 | 20 | 10 | 20 |)11 | 5-Year Median | |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
| Disease | No. | Rate* | No. | Rate* |
| Chlamydia | 8,110 | 357.7 | 8,219 | 362.5 | 8,204 | 361.9 | 8,825 | 389.2 | 8,398 | 370.4 | 8,219 | 362.5 |
| Gonorrhea | 2,782 | 122.7 | 2,560 | 112.9 | 2,196 | 96.9 | 2,093 | 92.3 | 2,067 | 91.2 | 2,196 | 96.9 |
| P&S Syphilis | 49 | 2.2 | 57 | 2.5 | 69 | 3.0 | 98 | 4.3 | 91 | 4.0 | 69 | 3.0 |

^{*} Incidence rates calculated per 100,000 population based on the 2010 estimate of the population (U.S. Census Bureau).



▲ Figure 1. Between 2002-2011, the number of chlamydia cases increased 55%, from 5,695 cases in 2004 to 8,825 cases in 2010. In 2011, 8,398 cases were reported, a 5% decline since the peak in 2010. P&S syphilis cases increased dramatically between 2003 (n=26) and 2010 (n=98), an incrase of 277%. P&S syphilis cases declined from 98 in 2010 to 91 in 2011, a 7% decline. Relative to chlamydia and P&S syphilis cases, gonorrhea case reports have been relatively stable between 2002 and 2011. In 2011, 2,067 cases were reported.



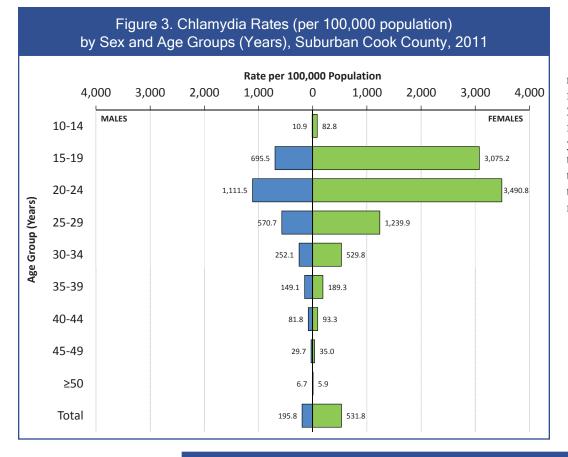
★ Figure 2. Rates of chlamydia in suburban Cook County, in Illinois, and in the United States have increased between 2002 and 2011. In 2011, Suburban Cook County had the lowest chlamydia rate, 370.4 per 100,000 population, compared to 457.6 per 100,000 population in the US overall, 506.1 per 100,000 population in Illinois and 1,031.5 per 100,000 population in Chicago.

Table 2. Number, Proportion and Rates (per 100,000 population) of Reported Chlamydia Cases by Selected Characteristics, Suburban Cook County, 2009-2011

| | | 2009 | | | Year 2010 | | 2011 | | | |
|------------------------|-------|---------|---------|-------|--------------|---------|-------|---------|---------|--|
| Characteristic | No. | (%) | Rate* | No. | (%) | Rate* | No. | (%) | Rate* | |
| Gender | | (/-/ | | | (/-/ | | | (/-/ | | |
| Male | 1,967 | (24.0) | 179.5 | 2,140 | (24.2) | 195.3 | 2,145 | (25.5) | 195.8 | |
| Female | 6,237 | (76.0) | 532.4 | 6,651 | (75.4) | 532.4 | 6,230 | (74.2) | 531.8 | |
| Unknown | 0 | 0.0 | n/a | 34 | (0.4) | n/a | 23 | (0.3) | n/a | |
| Race/Ethnicity | | | | | , , | | | ` , | | |
| Non-Hispanic White | 864 | (10.5) | 67.3 | 867 | (9.8) | 67.5 | 908 | (10.8) | 70.7 | |
| Non-Hispanic Black | 3,714 | (45.3) | 1,004.0 | 4,236 | (48.0) | 1,145.2 | 4,229 | (50.4) | 1,143.3 | |
| Hispanic | 1,111 | (13.5) | 254.4 | 1,279 | (14.5) | 292.9 | 1,432 | (17.1) | 327.9 | |
| Asian/Pacific Islander | 45 | (0.5) | 30.0 | 47 | (0.5) | 31.4 | 72 | (0.9) | 48.1 | |
| Other/Unknown | 2,470 | (30.1) | n/a | 2,396 | (27.2) | n/a | 1,757 | (20.9) | n/a | |
| Age Group (Years) | | | | | | | | | | |
| <10 | 5 | (1.0) | 29.2 | 6 | (0.1) | 2.0 | 8 | (0.1) | 2.7 | |
| 10-14 | 86 | (34.7) | 1,769.8 | 104 | (1.2) | 64.6 | 76 | (0.9) | 47.2 | |
| 15-19 | 2,847 | (35.3) | 1,805.5 | 3,150 | (35.7) | 1,961.8 | 2,963 | (35.3) | 1,845.4 | |
| 20-24 | 2,899 | (15.3) | 948.7 | 3,145 | (35.6) | 2,379.4 | 3,004 | (35.8) | 2,272.7 | |
| 25-29 | 1,254 | (6.9) | 397.6 | 1,301 | (14.7) | 907.5 | 1,305 | (15.5) | 910.3 | |
| 30-34 | 570 | (3.1) | 178.7 | 587 | (6.7) | 414.7 | 555 | (6.6) | 392.1 | |
| 35-39 | 253 | (1.7) | 95.4 | 290 | (3.3) | 197.6 | 249 | (3.0) | 169.7 | |
| 40-44 | 140 | (1.0) | 52.0 | 107 | (1.2) | 69.5 | 135 | (1.6) | 87.7 | |
| 45-49 | 80 | (0.9) | 41.3 | 69 | (8.0) | 40.7 | 55 | (0.7) | 32.4 | |
| >50 | 70 | (0.9) | 9.2 | 66 | (0.7) | 8.6 | 48 | (0.6) | 6.3 | |
| District | | | | | | | | | | |
| North | 1,326 | (16.2) | 143.0 | 1,317 | (14.9) | 142.0 | 1,342 | (16.0) | 144.7 | |
| West | 2,045 | (24.9) | 405.8 | 2,085 | (23.6) | 413.7 | 2,176 | (25.9) | 431.8 | |
| Southwest | 900 | (11.0) | 247.3 | 1,064 | (12.1) | 292.4 | 814 | (9.7) | 223.7 | |
| South | 3,891 | (47.4) | 824.7 | 4,339 | (49.2) | 919.7 | 4,037 | (48.1) | 855.7 | |
| Unknown | 42 | (0.5) | n/a | 20 | (0.2) | n/a | 29 | (0.3) | n/a | |
| Total | 8,204 | (100.0) | 361.9 | 8,825 | (100.0) | 389.2 | 8,398 | (100.0) | 370.4 | |

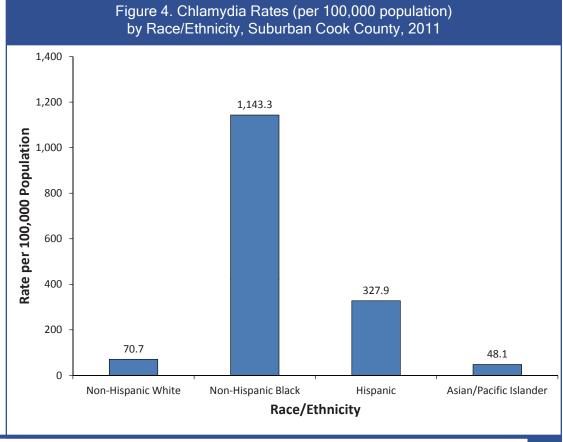
^{*}Incidence rates calculated per 100,000 population based on 2010 estimates of the population (U.S. Census Bureau).

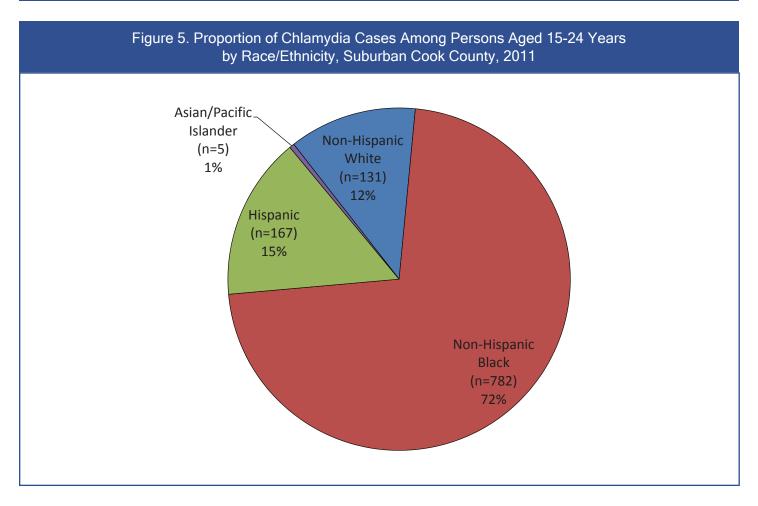
▲ Table 2. Sex: Between 2009 and 2011, 75% of reported chlamydia cases were female. Age Groups: In 2011 71% of reported chlamydia cases were 15-24 years of age. Race/Ethnicity: In 2011, 50.4% of reported chlamydia cases were non-Hispanic Black. In 2011, the rate of chlamydia in non-Hispanic Blacks (1,143.3 per 100,000 population) was 3.5 times higher than the rate in Hispanics (327.8 per 100,000 population) 16 times higher than the rate in non-Hispanic Whites (70.7 per 100,000 population) and 24 times higher than the rate in Asian/Pacific Islanders (48.1 per 100,000 population). District: Chlamydia rates were highest in the South District (855.7 per 100,000 population) followed by the West district (431.8 per 100,000 population).



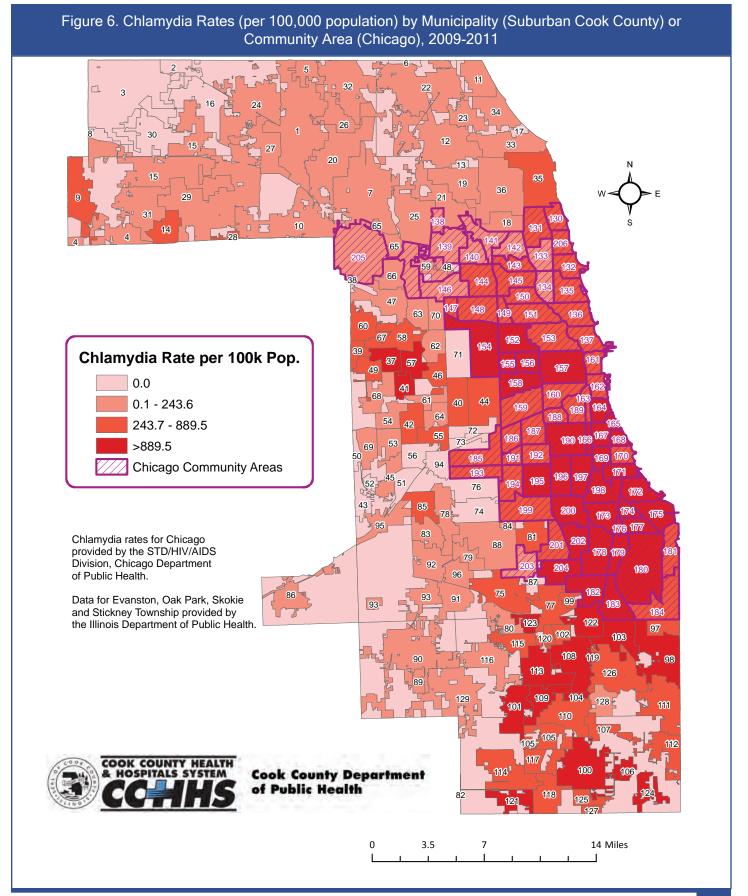
◆Figure 3. The chlamydia rates for both males and females were highest in the 20-24 year old age group followed by those aged 15-19 years of age. However, among those aged 15-19 years of age, the rate in females was 4.4 times greater than the rate in males.

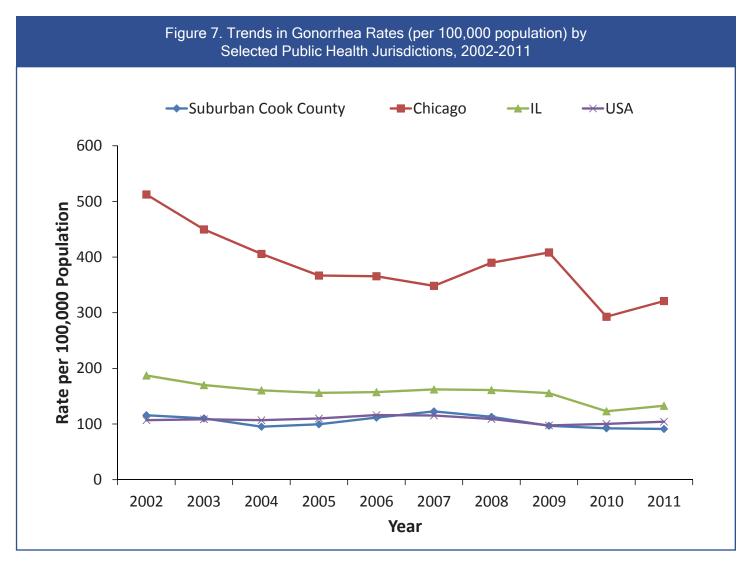
▶ Figure 4. The 2011 chlamydia rate in non-Hispanic Blacks was 3.5 times higher than the rate in Hispanics, 16 times higher than the rate in non-Hispanic Whites, and nearly 24 times higher than the rate in Asian. Pacific Inslanders.





▲ Figure 5. In 2011, a majority of chlamydia cases reported in youth (persons aged 15-24 years) were non-Hispanic Black (72%); 15% of cases were Hispanic, 12% of cases were non-Hispanic White, and less than 1% of cases diagnosed in 2011 were Asian/Pacific Islanders.





▲ Figure 7. over the past 10 years, gonorrhea rates in suburban Cook County have been relatively constant and were similar to rates in the United States. In 2011, the gonorrhea rate in suburban Cook County was 91.2 per 100,000 population. The rate in the US overall was 104.2 per 100,000 population. The 2011 gonorrhea rates in Illinois and Chicago were 132.8 and 321.1 per 100,000 population, respectively.

Table 3. Number, Proportion and Rates (per 100,000 population) of Reported Gonorrhea Cases by Selected Characteristics, Suburban Cook County, 2009-2011

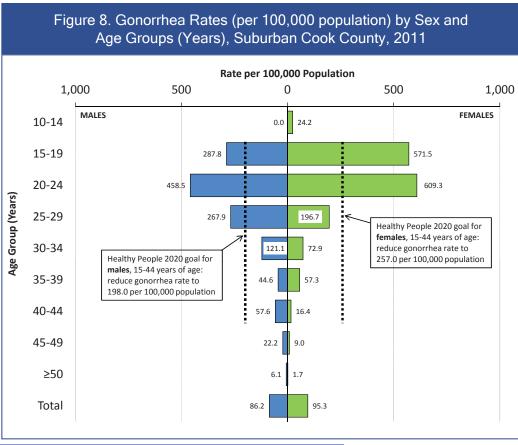
| | | | | | Year | | | | |
|--------------------|-------|---------|-------|-------|---------|-------|-------|---------|-------|
| | | 2009 | | | 2010 | | | 2011 | |
| Characteristic | No. | (%) | Rate* | No. | (%) | Rate* | No. | (%) | Rate* |
| Gender | | | | | | | | | |
| Male | 971 | (44.2) | 88.6 | 914 | (43.7) | 83.4 | 944 | (45.7) | 86.2 |
| Female | 1,225 | (55.8) | 104.6 | 1,171 | (55.9) | 100.0 | 1,117 | (54.0) | 95.3 |
| Unknown | 0 | 0.0 | n/a | 8 | (0.4) | n/a | 6 | (0.3) | n/a |
| Race/Ethnicity | | | | | | | | | |
| Non-Hispanic White | 139 | (6.3) | 10.8 | 136 | (6.5) | 10.6 | 117 | (6.5) | 9.3 |
| Non-Hispanic Black | 1,373 | (62.5) | 371.2 | 1,346 | (64.3) | 363.9 | 1,460 | (64.3) | 394.7 |
| Hispanic | 106 | (4.8) | 24.3 | 106 | (5.1) | 24.3 | 117 | (5.1) | 26.8 |
| Asian | 4 | (0.2) | § | 8 | (0.4) | 5.3 | 4 | (0.4) | |
| Other/Unknown | 574 | (26.1) | n/a | 497 | (23.7) | n/a | 369 | (23.7) | n/a |
| Age Group (Years) | | | | | | | | | |
| <10 | 2 | (0.1) | § | 1 | (0.0) | § | 1 | (0.0) | |
| 10-14 | 25 | (1.1) | 15.5 | 30 | (1.4) | 18.6 | 21 | (1.0) | 13.3 |
| 15-19 | 729 | (33.2) | 454.0 | 722 | (34.5) | 449.7 | 684 | (33.1) | 426.0 |
| 20-24 | 745 | (33.9) | 563.6 | 731 | (34.9) | 553.0 | 706 | (34.2) | 534.3 |
| 25-29 | 314 | (14.3) | 219.0 | 291 | (13.9) | 203.0 | 333 | (16.1) | 232.3 |
| 30-34 | 165 | (7.5) | 116.6 | 139 | (6.6) | 98.2 | 137 | (6.6) | 96.8 |
| 35-39 | 96 | (4.4) | 65.4 | 91 | (4.3) | 62.0 | 75 | (3.6) | 51.3 |
| 40-44 | 49 | (2.2) | 31.8 | 40 | (1.9) | 26.0 | 56 | (2.7) | 36.4 |
| 45-49 | 34 | (1.5) | 20.1 | 24 | (1.1) | 14.2 | 26 | (1.3) | 15.3 |
| >50 | 37 | (1.7) | 4.8 | 24 | (1.1) | 3.1 | 28 | (1.4) | 3.7 |
| District | | | | | | | | | |
| North | 161 | (7.3) | 17.4 | 151 | (7.2) | 16.3 | 146 | (7.1) | 15.7 |
| West | 413 | (18.8) | 81.9 | 413 | (19.7) | 81.9 | 477 | (23.1) | 94.0 |
| Southwest | 266 | (12.1) | 73.1 | 240 | (11.5) | 66.0 | 172 | (8.3) | 47. |
| South | 1,338 | (60.9) | 283.6 | 1,282 | (61.3) | 271.7 | 1,261 | (61.0) | 267. |
| Unknown | 18 | (0.8) | n/a | 7 | (0.3) | n/a | 11 | (0.5) | n/a |
| Total | 2,196 | (100.0) | 96.9 | 2,093 | (100.0) | 92.3 | 2,067 | (100.0) | 91.2 |

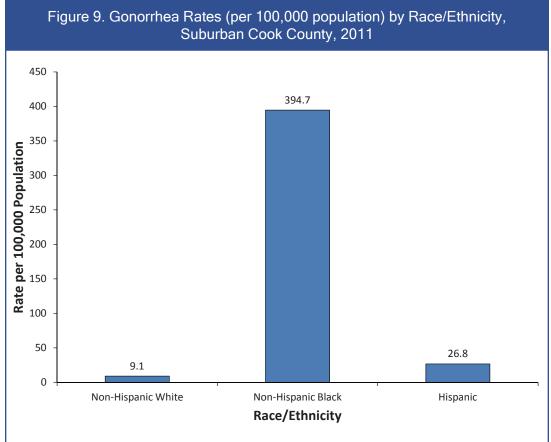
^{*} Incidence rates calculated per 100,000 population based on the 2010 estimate of the population (U.S. Census Bureau).

▲ Table 3. Sex: Between 2009 and 2011, 55% of reported gonorrhea cases were female. Race/Ethnicity: in 2011, 64% of gonorrhea cases were in non-Hispanic Blacks; 6.5% were non-Hispanic White and 5.1% were Hispanic. The 2011 gonorrhea rate in non-Hispanic Blacks was 394.7 per 100,000, 43 times higher than the rate in non-Hispanic Whites (9.1 per 100,000 population) and nearly 15 times higher than the rate in Hispanics (26.8 per 100,000 population). Age Groups: As with chlamydia, the majority (83.4%) of cases were 15-29 yearsof age; of these, 80% were aged 14-24 years. District: In 2011, 51% of gonorrhea cases were diagnosed in the South Distict and 23.1% were diagnosed in the West District. The South and West districts also had the highest gonorrhea rates in 2011 (267.3 and 94.6 per 100,000 population, respectively).

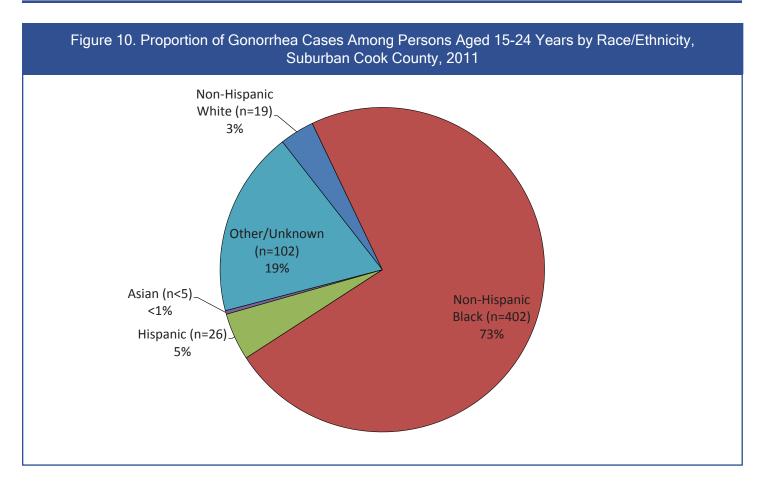
[§] Rate not calculated for n<5.

► Figure 8. As was the case with chlamydia rates, gonorrhea rates were highest in persons aged 15-24 years of age. Females aged 20-24 years of had the highest gonorrhea rate in 2011 (609.3 per 100,000 population), followed by females 15-19 years of age (571.5 per 100,000 population). The average rate in females aged 15-44 years of age was 246.5 per 100,000 population, lower, overall, than the HP2020 goal of 257.0 per 100,000 population in this age group. Among males, those aged 20-24 years had the highest gonorrhea rate (458.5 per 100,000 population), followed by males aged 15-19 years (287.8 per 100,000 population). The average rate in males aged 15-44 years was 205.5 per 100,000 population, higher, overall, than the HP2020 goal of 198.0 per 100,000 population in this age group.

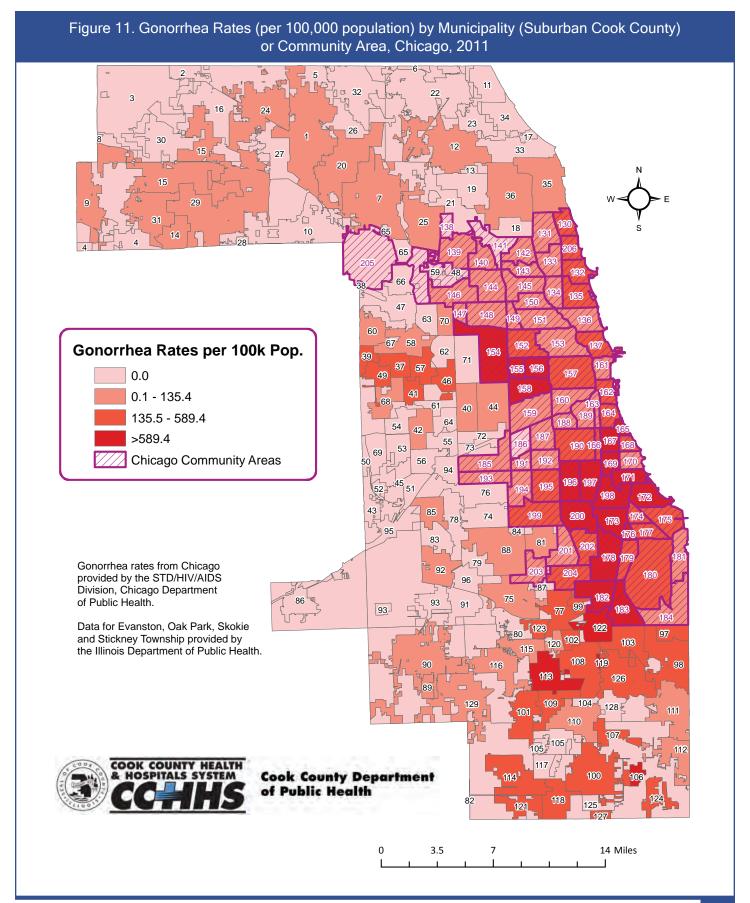


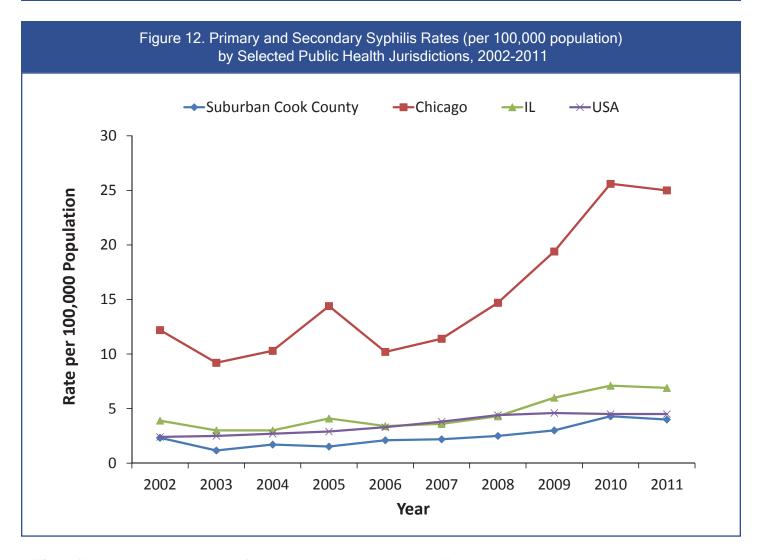


⋖Figure 9. The 2011 gonorrhea rate in non-Hispanic Blacks was 394.7 per 100,000, 43 times higher than the rate in non-Hispanic Whites (9.1 per 100,000 population) and nearly 15 times higher than the rate in Hispanics (26.8 per 100,000 population).



▲ Figure 10. Among gonorrhea cases reported in 2011 who were 15-24 years of age, 73% were non-Hispanic Black, 5% were Hispanic, 3% were non-Hispanic White and less than 1% were Asian/Pacific Islanders.





▲ Figure 11. Between 2002-2011, rates of primary and secondary (P&S) syphilis in suburban Cook County were typically lower than the rates in the US overall, lower than the rates in Illinois and lower than the rates in Chicago. In 2011, the rate of P&S syphilis in suburban Cook County was 4.0 per 100,000 population. In the US overall, the rate was 4.5 per 100,000 population. The P&S syphilis rate in Illinois was 6.9 per 100,000 population. Chicago had the highest P&S syphilis rate at 25.0 per 100,000 population, 6 times higher than the rate in suburban Cook County. In suburban Cook County and in Chicago, P&S syphilis rates decreased somewhat from 2010 to 2011.

Table 4. Number, Proportion and Rates (per 100,000 population) of Syphilis Cases and Selected Characteristics of P&S Syphilis Cases, Suburban Cook County, 2009-2011

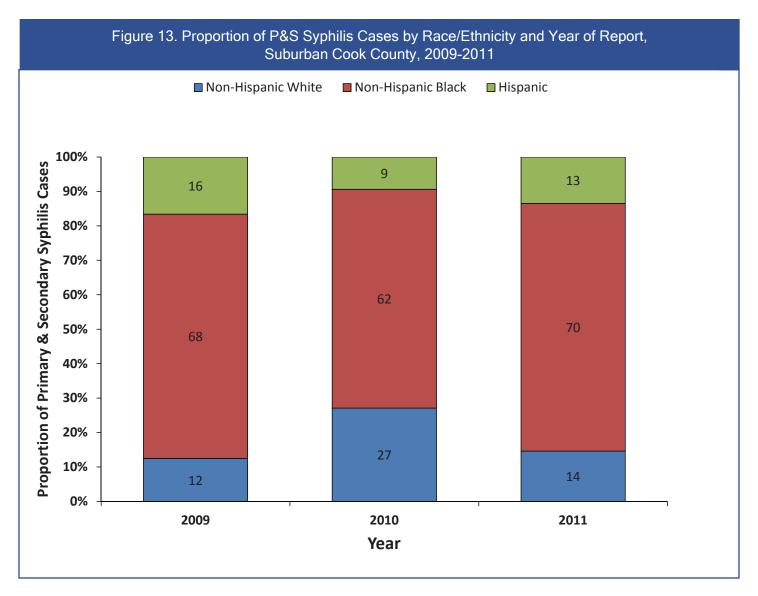
| | | | | Year | | | | | | |
|-----------------------------|------|---------|-------|------|---------|-------|------|---------|-------|--|
| | 2009 | | | 2010 | | | 2011 | | | |
| Characteristic | No. | (%) | Rate* | No. | (%) | Rate* | No. | (%) | Rate* | |
| Syphilis Stage | | | | | | | | | | |
| Primary and Secondary | 69 | (31.5) | 3.0 | 98 | (41.4) | 4.3 | 91 | (34.5) | 4.0 | |
| Early Latent | 64 | (29.2) | 2.8 | 53 | (22.4) | 2.3 | 80 | (30.3) | 3.5 | |
| Late Latent | 83 | (37.9) | 3.7 | 80 | (33.8) | 3.5 | 86 | (32.6) | 3.8 | |
| Congenital¶ | 3 | (1.4) | § | 6 | (2.5) | 0.3 | 7 | (2.7) | 0.3 | |
| Total | 219 | (100.0) | 9.7 | 237 | (100.0) | 10.5 | 264 | (100.0) | 11.6 | |
| Primary and Secondary Cases | | | | | | | | | | |
| Sex | | | | | | | | | | |
| Male | 62 | (89.9) | 5.7 | 90 | (91.8) | 8.2 | 83 | (91.2) | 7.6 | |
| Female | 7 | (10.1) | 0.6 | 8 | (8.2) | 0.7 | 8 | (8.8) | 0.7 | |
| Race/Ethnicity | | , , | | | , , | | | , , | | |
| Non-Hispanic White | 8 | (11.6) | 0.6 | 26 | (26.5) | 2.0 | 13 | (14.3) | 1.0 | |
| Non-Hispanic Black | 47 | (68.1) | 3.7 | 61 | (62.2) | 4.8 | 64 | (70.3) | 5.0 | |
| Hispanic | 11 | (15.9) | 0.9 | 9 | (9.2) | 0.7 | 12 | (13.2) | 0.9 | |
| Asian | 0 | 0.0 | 0.0 | 2 | (2.0) | § | 1 | (1.1) | § | |
| Other/Unknown | 3 | (4.3) | § | 0 | 0.0 | 0.0 | 1 | (1.1) | § | |
| Age Group (in years) | | , , | | | | | | | | |
| <20 | 6 | (8.7) | 1.0 | 10 | (10.2) | 1.6 | 4 | (4.4) | 0.6 | |
| 20-24 | 15 | (21.7) | 2.4 | 24 | (24.5) | 3.9 | 25 | (27.5) | 4.1 | |
| 25-29 | 15 | (21.7) | 2.4 | 16 | (16.3) | 2.6 | 23 | (25.3) | 3.7 | |
| 30-34 | 8 | (11.6) | 1.3 | 7 | (7.1) | 1.1 | 11 | (12.1) | 1.8 | |
| 35-39 | 4 | (5.8) | 0.6 | 13 | (13.3) | 2.1 | 7 | (7.7) | 1.1 | |
| 40-44 | 7 | (10.1) | 1.1 | 7 | (7.1) | 1.1 | 6 | (6.6) | 1.0 | |
| 45-49 | 8 | (11.6) | 1.3 | 15 | (15.3) | 2.4 | 7 | (7.7) | 1.1 | |
| >50 | 6 | (8.7) | 1.0 | 6 | (6.1) | 1.0 | 8 | (8.8) | 1.3 | |
| District | | | | | | | | | | |
| North | 14 | (20.3) | 1.5 | 17 | (17.3) | 1.8 | 14 | (15.4) | 1.5 | |
| West | 17 | (24.6) | 3.4 | 28 | (28.6) | 5.6 | 25 | (27.5) | 5.0 | |
| Southwest | 6 | (8.7) | 1.6 | 8 | (8.2) | 2.2 | 12 | (13.2) | 3.3 | |
| South | 32 | (46.4) | 6.8 | 45 | (45.9) | 9.5 | 40 | (44.0) | 8.5 | |
| Total P&S Syphilis Cases | 69 | (100.0) | 3.0 | 98 | (100.0) | 4.3 | 91 | (100.0) | 4.0 | |

^{*} Incidence rates calculated per 100,000 population based on 2010 estimate of the population (U.S. Census Bureau).

▶ Table 4. Syphilis Stage: Between 2009 and 2011, approximately a third of cases were classified as P&S syphilis, Sex: Among P&S syphilis cases in 2011, the overwhelming majority of cases were males (91.2%). The P&S syphilis rate in males in 2011 was 7.6 per 100,000 population, greater than the HP2020 goal for males (6.8 per 100,000 population). The P&S syphilis rate in females in 2011 was 0.7, lower than the HP2020 goal of 1.5 per 100,000 population. Race/Ethnicity: In 2011, 70.3% of reported P&S syphilis cases were non-Hispanic Black. District: Forty-four percent (44%) of all P&S syphilis cases reported living in the South District and 27.5% reported living in the West District. The rate of P&S syphilis in the South District was 8.5 per 100,000, more than double the 2011 average rate in suburban Cook County of 4.0 per 100,000 population.

[¶] Congenital syphilis rates calculated per 100,000 live births (taken from Community Profiles 2003-2005).

[§] Rates not calculated for n<5.



▲ Figure 13. Among P&S syphilis cases reported in suburban Cook County in 2011, 70% were non-Hispanic Black, 14% were non-Hispanic White and 13% were Hispanic.

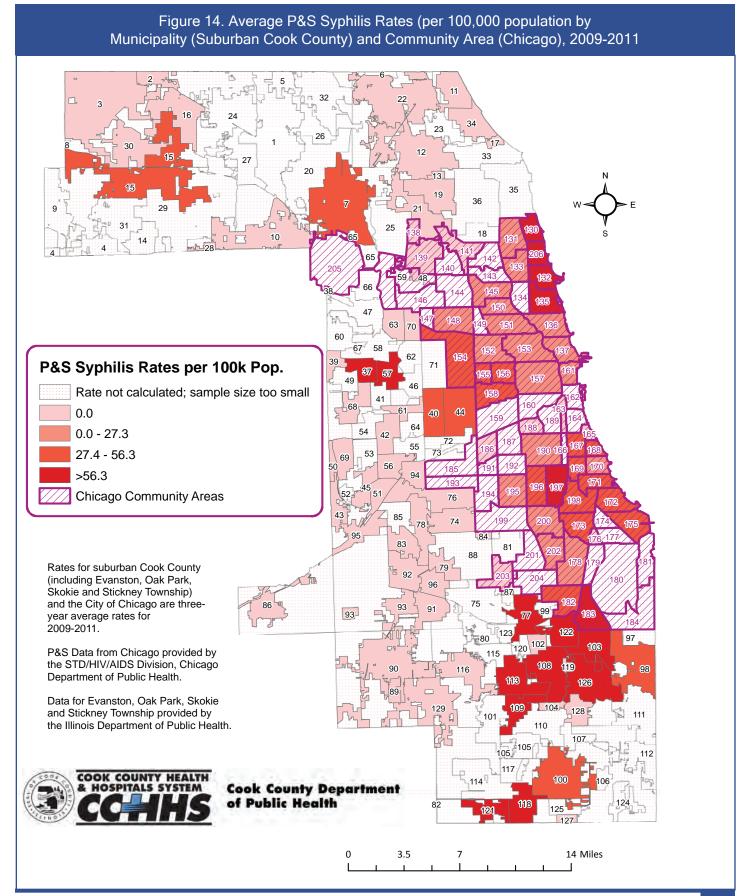


Table 7. Map Key - Suburban Cook County Municipalities and Chicago Community Areas

| | | f # City/Town/Com. Area | _ | City/Town/Com. Area | | City/Town/Com. Area |
|------------|--------------|-------------------------|-----|-----------------------|----|----------------------------|
| • | n Heights 5 | · · | 105 | Flossmoor | 28 | Near West Side |
| Barringt | | · · | 106 | Ford Heights | 29 | North Lawndale |
| Barringt | on Hills 5 | , | 107 | Glenwood | 30 | South Lawndale |
| Bartlett | 5 | 6 McCook | 108 | Harvey | 31 | Lower West Side |
| Buffalo | Grove 5 | 7 Maywood | 109 | Hazel Crest | 32 | Loop |
| Deerfiel | d 5 | 8 Melrose Park | 110 | Homewood | 33 | Near South Side |
| Des Plai | nes 5 | 9 Norridge | 111 | Lansing | 34 | Armour Square |
| East Du | ndee 6 | 0 Northlake | 112 | Lynwood | 35 | Douglas |
| Elgin | 6 | 1 North Riverside | 113 | Markham | 36 | Oakland |
| 0 Elk Grov | re Village 6 | 2 River Forest | 114 | Matteson | 37 | Fuller Park |
| 1 Glencoe | 6 | 3 River Grove | 115 | Midlothian | 38 | Grand Boulevard |
| 2 Glenvie | w 6 | 4 Riverside | 116 | Oak Forest | 39 | Kenwood |
| 3 Golf | 6 | 5 Rosemont | 117 | Olympia Fields | 40 | Washington Park |
| 4 Hanove | r Park 6 | 6 Schiller Park | 118 | Park Forest | 41 | Hyde Park |
| 5 Hoffma | n Estates 6 | 7 Stone Park | 119 | Phoenix | 42 | Woodlawn |
| 5 Inverne | ss 6 | 8 Westchester | 120 | Posen | 43 | South Shore |
| 7 Kenilwo | rth 6 | 9 Western Springs | 121 | Richton Park | 44 | Chatham |
| 3 Lincolny | vood 7 | 0 Elmwood Park | 122 | Riverdale | 45 | Avalon Park |
| 9 Morton | Grove 7 | 1 Oak Park | 123 | Robbins | 46 | South Chicago |
|) Mount I | Prospect 7 | 2 Stickney | 124 | Sauk Village | 47 | Burnside |
| 1 Niles | 7 | 3 Forest View | 125 | South Chicago Heights | 48 | Calumet Heights |
| 2 Northbr | ook 7 | 4 Burbank | 126 | South Holland | 49 | Roseland |
| 3 Northfie | eld 7 | 5 Alsip | 127 | Steger | 50 | Pullman |
| 1 Palatine | | • | 128 | Thornton | 51 | South Deering |
| 5 Park Ric | ge 7 | 7 Blue Island | 129 | Tinley Park | 52 | East side |
| | t Heights 7 | 8 Bridgeview | 1 | Rogers Park | 53 | West Pullman |
| • | Meadows 7 | · · | 2 | West Ridge | 54 | Riverdale |
| Roselle | 8 | 0 0 | 3 | Uptown | 55 | Hegewisch |
| Schaum | burg 8 | 1 Evergreen Park | 4 | Lincoln Square | 56 | Garfield Ridge |
| | arrington 8 | = | 5 | North Center | 57 | Archer Heights |
| L Stream | ŭ. | | 6 | Lake View | 58 | Brighton Park |
| 2 Wheelir | | , | 7 | Lincoln Park | 59 | Mckinley Park |
| 3 Wilmett | ŭ | | 8 | Near North Side | 60 | Bridgeport |
| 4 Winnetl | | | 9 | Edison Park | 61 | New City |
| Evansto | | | 10 | Norwood Park | 62 | West Elsdon |
| Skokie | 8 | | 11 | Jefferson Park | 63 | Gage Park |
| Bellwoo | | | 12 | Forest Glen | 64 | Clearing |
| Bensen | | | 13 | North Park | 65 | West Lawn |
| Berkele | | | 14 | Albany Park | 66 | Chicago Lawn |
|) Berwyn | 9 | · · | 15 | Portage Park | 67 | West Englewood |
| L Broadvi | | | 16 | Irving Park | 68 | Englewood |
| 2 Brookfie | | | 17 | Dunning | 69 | Greater Grand Crossing |
| Burr Rid | | | 18 | Montclare | 70 | Ashburn |
| | - | | | | 70 | Auburn Gresham |
| | sido 9 | | 19 | Belmont Cragin | | |
| Country | | | 20 | Hermosa | 72 | Beverly Washington Heights |
| Forest F | | , | 21 | Avondale | 73 | 0 0 |
| 7 Franklin | | | 22 | Logan Square | 74 | Mount Greenwood |
| | d Heights 10 | 0 0 | 23 | Humboldt Park | 75 | Morgan Park |
| 9 Hillside | | 1 Country Club Hills | 24 | West Town | 76 | O'Hare |
| O Hinsdal | | 2 Dixmoor | 25 | Austin | 77 | Edgewater |
| 1 Hodgkir | | | 26 | West Garfield Park | | |
| ! Indian F | lead Park 10 | 14 East Hazel Crest | 27 | East Garfield Park | | |

TECHNICAL NOTES

Cook County Department of Public Health Jurisdiction

The jurisdiction of the Cook County Department of Public Health includes all municipalities and portions within Cook County, except for Chicago, Evanston, Oak Park, Skokie and Stickney Township, each of which has its own state-certified local health department. Throughout this report, the term, "suburban Cook County" refers to CCDPH's jurisdiction with the exceptions noted above.

Data Methodology

Medical providers and laboratories within suburban Cook County are required by law to report positive cases of chlamydia, gonorrhea, and syphilis to the Cook County Department of Public Health within 7 days of diagnosis. These case reports are then entered into a secure database and forwarded to the Illinois Department of Public Health, providing the basis for the information presented in this report. Incidence rates were calculated using population estimates from the U.S. Census Bureau (2010 Census).

Data Limitations

This report includes all reported cases of chlamydia, gonorrhea, and syphilis, but does not represent the entire population of persons infected because not all infected persons have been tested or reported. Frequently, there is a considerable lag between the time a person is diagnosed with an STI and the time the local health department receives the report. Additionally, persons with asymptomatic STIs, such as chlamydia, may be underrepresented in surveillance reports because many such individuals may not seek care, may remain undiagnosed, and, consequently, unreported.